JPRS 79044

23 September 1981

East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2177

FBIS FOREIGN BROADCAST INFORMATION SERVICE

NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service, Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in Government Reports Announcements issued semi-monthly by the National Technical Information Service, and are listed in the Monthly Catalog of U.S. Government Publications issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Indexes to this report (by keyword, author, personal names, title and series) are available from Bell & Howell, Old Mansfield Road, Wooster, Ohio 44691.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

JPRS 79044

23 September 1981

EAST EUROPE REPORT

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2177

CONTENTS

ALBANIA

Development of Machine Industry Discussed
(Llazar Xhajanka; RRUGA E PARTISE, Apr 81) 1

Need for Expansion, Improvement of Communal Services Seen
(Valentina Leskaj; RRUGA E PARTISE, May 81) 10

CZECHOSLOVAKIA

Plan Fulfillment Report for First Half of 1981 Published
(PRAVDA, 29 Jul 81) 18

First Half 1981 Economic Developments Summarized
(HOSPODARSKE NOVINY, 31 Jul 81) 27

HUNGARY

Situation of Investments in Plan Periods Examined
(Arpad Kovacs; PARTELET, Aug 81) 32

Csepel Works Role in CEMA Non-Ferrous Metallurgy Noted
(Tamas Grof, Bela Albert; KOHASZAT, Jul 81) 39

CEMA Cooperation for Exploitation of Non-Ferrous Metallurgy
(Karoly Budai; KOHASZAT, Jul 81) 46

POLAND

Inflation in Polish Economy During 1981-1983 Analyzed
(Wiktor Herer, Wladyslaw Sadowki; ZYCIE GOSPODARCZE,
9 Aug 81) 50

[III - EE - 64]

ROMANIA

Role of Scientific Research in Production Process Viewed
(Mihail Florescu; REVISTA ECONOMICA, 21 Aug 81) 57

Agricultural Progress, Plans for Future Described
(Marin Constantin; REVISTA ECONOMICA, 21 Aug 81) 64

DEVELOPMENT OF MACHINE INDUSTRY DISCUSSED

Tirana RRUGA E PARTISE in Albanian Apr 81 pp 5-14

[Article by Llazar Xhajanka on the problems of the recent plenums of the Albanian Workers Party Central Committee: "Centralization, Specialization and Cooperation--Important Factors for the Development of the Machine Industry"; passages between slantlines printed in boldface]

[Text] Under the direct and continuous concern of the party, today our country has a powerful machine industry which has become a great support for the development of the economy and of the defense power of the country.

During the Sixth Five-Year Plan, many important and complicated spare parts were designed, tested and produced, such as engine axles, helicoidal cogwheels, heads and blocks for engines and many other spare parts for the petroleum and mining industries, for the heavy machines for the hydroelectric power stations, for the construction sector and so forth. The task assigned by the Seventh Party Congress to supply 95 percent of the needs for spare parts with domestic products was fulfilled. Along with the assimilation of a broad range of spare parts, important results were also achieved in the production of machines and pieces of equipment in order to improve the level of mechanization of work processes in the various sectors of the economy up to the construction of lines, plants and complete projects.

Today our machine industry is passing into a new stage of development. Along with the task of satisfying the needs for spare parts, priority is given to the task of designing and producing, completely with our own forces, machinery and equipment for complete projects and for increasing the production of machinery and other means such as tractors, trucks, combines, vessels of medium tonnage, probes for deep drillings and so forth. /"Our country,"/ Comrade Enver Hoxha said at the Eighth Plenum of the Party Central Committee, /"is entering more broadly into a new stage of the machine industry, the stage of the machine building industry"/ (Enver Hoxha, "The Progress of the Country Is Inseparable From the Development of Science and Technology," Pamphlet, p 22).

The implementation of the qualitative leap which has begun and which is being developed for the design and industrial production of machines and pieces of equipment for the various branches of the economy is not only a necessity required by the present stage of development of the economy, but is also fully able to be implemented, because all the objective and subjective conditions have been created to place the machine industry, as Comrade Enver Hoxha said, on completely new rails, in order to modernize it in regard to planning and cooperating, by intensifying and extending centralization of production into specialized units, in accordance with the technological similarity of parts.

/Intensification of specialization and of centralization and the extension of cooperation are not only important factors for improving the productivity of social labor, but also a necessity for executing advanced technology./

It is a fact that efforts have been made and are being made for the specialization of production in the machine industry. However, so far, efforts have been directed mainly toward specialization according to projects and very little toward specialization according to technological similarity of work parts, specializing only some lines and sectors in some large plants.

Of course, even specialization according to projects marks a great positive step forward, compared to that stage when machine plants or workshops used to deal with the production of all kinds of goods and with the satisfying of the needs for all kinds of goods. Nevertheless, it does not eliminate, but it continues to maintain and to manifest, in a mild form, some of the weaknesses which used to characterize production in the past, and still remains far away from some good features which characterize specialized production according to the technological similarity of the parts.

For example, it is known that the plants and workshops with specialization according to the project still continue to produce a very large nomenclature of parts in relatively small quantities: this objectively complicates and does not sufficiently stimulate the perfection of technology of production. This fact constitutes one of the reasons why, even today, in some plants and workshops which are specialized, production technology is below the level of technical and material possibilities at the disposal of these plants and workshops and below the capacities of workers who work in them.

Specialization according to the project has not been able to eliminate some duplication in the production of similar or identical parts, joints, pieces of equipment, instruments and consumer goods. Thus, for example, today many plants and workshops of our country simultaneously produce pistons, engine axles, jackets, cogwheels and so forth which, regardless of their construction and different dimensions and regardless of whether they are used for vehicles, tractors and so forth, but because they have the same production technology, can be centralized for their production in plants specialized in accordance with the technological similarity of the parts. Of course, not all duplicate products for the same parts are based on specialization according to the part. Often, they are affected by departmental and local favoritism existing in some cadres and workers who cannot easily detach themselves from the outdated concept "of providing everything within the enterprise or within the government department." On the basis of this concept, some executive committees of the district people's councils and some central departments entrust some plants with production tasks which are outside their field, the fulfillment of these tasks has forced them to set up small sectors and units which work with low technical and economic indicators. Thus, for example, in Tirana alone there are seven galvanizing units which are used very little and, in spite of this fact, the electrical-medical plant has put in its research-scientific work plan a study on the establishment of another galvanizing line.

The disharmony existing in some of these plants and workshops between the structure of the production of a large nomenclature of spare parts, on the one hand, and the machine base, on the other hand, is another factor which greatly influences the failure to properly utilize some kinds of metal-cutting machines in a broad and thorough manner. For example, it happens that in a workshop, lathes are more heavily loaded; while other machines, such as grinding machines, cogwheel machines, cutting machines and so forth, are not properly loaded. Also, because of the lack of necessary technical training, of technological documentation and of many pieces of equipment and of instruments required for the production of various kinds of parts of a very large nomenclature, it happens that in some cases the preparation of work processes takes a long time.

It has been proven that such shortcomings and weaknesses can be considerably eliminated through the centralization and specialization of production according to the technological similarity of the parts by applying more broadly the technology of work in group. However, to pass gradually and rapidly to such a concentration and specialization of production in the machine industry, it is necessary, first of all, to have deep convictions about the necessity of further and continually perfecting the scientific organization of production in general and of centralization, specialization and cooperation in particular in the struggle against every remnant of manifestations of the artisan spirit and of tendencies and close practices of governmental and local favoritism. Failing to do this, it is not possible to struggle successfully against those manifestations of expectation, of spontaneity, of delaying, of voluntarism and of subjectivism observed in the execution of the tasks for centralization and further specialization of production and for the expansion and intensification of cooperation in the machine industry.

Practice has proven that in the machine industry, as anywhere else, centralization and specialization of production have greater priority over the small and scattered production. Working in groups, for example, makes it possible to increase the number of articles in series production and to reduce the number of pieces of equipment, of instruments and of the necessary technological documentation and, at the same time, insures high yields in work and good quality in production. Thus, for example, centralization of the production of jackets for engines, pistons, bushings, pumps and so forth at the "Enver Hoxha" auto-tractor combine and at the UMB [agricultural machine plant] in Korce made it possible to reduce production expenditures 2-4 times and to improve quality in a noticeable manner. At the "Enver Hoxha" auto-tractor combine, as a result of the use of technology of work in groups and of universal assembly equipment, expenditures for pieces of equipment and for various cutting instruments were reduced by about 60 percent. On the basis of this experience, the combine workers are struggling to create 15 other lines concentrating on the production of parts according to technological similarity.

This experience, however, is not being disseminated as required in the other enterprises, especially, in those of the petroleum machine industry and elsewhere. Therefore, it is necessary for the responsible government departments, the government and economic organs in the districts, and the party committees and party organizations to give greater concern to this problem, so that all the people everywhere will be put in positions of work and in positions of making concrete implementations in this field.

In the framework of the further expansion of centralization and specialization of production in the machine industry, more attention should be given to centralization and specialization of production according to the similarity of technological processes in the specific stages of the processing of parts, in order to set up, in accordance with opportunities, conditions and needs, units or plants for foundry, forging, thermal processing, and for the production of welded metal constructions which will work to satisfy the needs of the entire economy. Such organization of production improves the level of the utilization of productive capacities and production quality and further develops planned cooperation for a regular satisfaction of all the needs of the enterprises for relevant articles.

Specialization of production according to the technological similarity of technological processes of the production of parts becomes even more complete under the conditions of unification and standardization of spare parts, instruments, joints and machines. Implementation of such a measure, in addition to other things, reduces planning work about 50 percent and creates favorable conditions for the production of spare parts and joints at low costs.

Component parts of the perfection on scientific bases of work organization in the machine industry also are the expansion, intensification and perfection of cooperation on the level of entire industry, along with the expansion of centralization and specialization of production. These two processes are so closely linked together that they cannot be understood and developed without each other. Therefore, all development, intensification and perfection carried out in the field of centralization and specialization of production also requires development, intensification and perfection in the field of cooperation.

When one speaks about cooperation in the machine industry, first of all, we understand the production of machines and of pieces of equipment with semi-fabricated items, parts, joints, aggregates and so forth supplied by the enterprises specializing in these products and specific processes and operations of metal processing executed in other enterprises.

So far, cooperation is being more broadly implemented in the machine industry and is being planned in the casting of parts and in the preparation of some articles such as electrical engines and special parts and in the production of machines for complete plants. However, as the party has pointed out, much remains to be done in the field of cooperation, both in regard to its expansion and in regard to its organization and implementation in practice, because, with its present development and with its weaknesses and shortcomings in implementation, cooperation does not respond to the present stage of development of our machine industry and to the satisfying of requirements for fulfilling the great tasks entrusted to the machine industry during this five-year plan.

Evaluating with a critical eye the relatively low level of production in the machine industry, obtained through cooperation, as well as the weaknesses and shortcomings existing in organization and implementation in this field, it appears that this unsatisfactory situation has its source in a narrow and rather artisan concept of cooperation; this is expressed later in planning and is usually characterized by tendencies to underestimate the tasks of cooperation in their practical fulfillment. Thus, for example, beside the total planning for cooperation in forging and pressing activities, in operational works of metal cutting machines, in thermal treatment and so forth. And, what are the consequences? The most varied and only negative consequences. First, the establishment and implementation of the very necessary relationships in cooperation for the kinds that we mentioned above is left to the spontaneity and voluntarism of some cadres who can accept or reject taking upon themselves the implementation of such unplanned tasks. Second, the establishment of relationships in cooperation is based on acquaintanceship and friendship on the basis of the watchword "give me this and I will do that." Third, as these obligations are not in the plan, the production team is faced with some material and other difficulties in regard to their implementation. Fourth, for the same reason, the production team does not feel itself fully obliged to devote the same concern to executing this production on time and with good quality as it does to fulfilling its own planned tasks.

From what we said above, it appears that the expansion of production achieved through cooperation in the machine industry and the establishment of this cooperation on scientifically organized bases set forth, above all, the task of extending and perfecting the planning of these requirements and needs, along with the correct evaluation of requirements, needs and possibilities for cooperation in order not to allow them to be treated as an optional task, outside the plan.

We stress this because of the fact that, although the implementation of the plan tasks for the production of machines and pieces of equipment for the projects of the Seventh Five-Year Plan requires a great increase in production through cooperation, it is observed that so far the tasks of cooperation are not being fully planned. Thus, many enterprises have planned a very small increase of cooperation for 1981, compared to 1980. For example, the enterprises in Tirana District have planned an increase of casting through cooperation of only about 6 percent and an increase of 12 percent for readymade articles, while they have reduced cooperation for the production of forged semi-fabricated materials. Therefore, it is necessary to struggle with great severity, concretely and systematically against every manifestation of governmental and local favoritism which impedes the expansion and satisfying of the needs and tasks in regard to cooperation. We stress this, because, it is observed that in some cases government departments see and treat cooperation in a narrow manner, solely to satisfy the needs of their enterprises, without taking into consideration the specialization of the specific enterprises. For example, the "Partizani" plant for more than 15 years has been casting iron platforms for pressing, which are produced by the electrical-technical enterprise in Tirana; however, with the transfer of the latter to the Ministry of Industry and Mines, the "Partizani" plant does not agree to cast these platforms and this task was assigned to the machine workshop in Peshkopi which is not specialized for this kind of production. It is with the same severity, force and systematic manner that we must struggle against every artisan spirit which has led and is leading to the erroneous practice that every enterprise should produce everything by itself, without taking into consideration, for example, that some parts can be assured more quickly, less costly and with required quality by specialized plants and workshops.

The radical shift required to be carried out in the machine industry, as a condition on its part for fulfilling the great and specifically new tasks entrusted to it during the present five-year plan, makes it necessary to adopt ideological, political and technical-organizational measures which would bring a noticeable and radical improvement to the field of cooperation. In this framework, a first-rate importance is given to the coordination of the problems of cooperation between the government departments, the executive committees of the district people's councils and the managements of the enterprises under their jurisdiction. The draft of the cooperation plan on the basis of requirements and productive capacities of the enterprises, relying on planning methodology, and the assignment of detailed concrete tasks in these plans and, in the meantime, the determining of the personnel to monitor and be responsible for the fulfillment of these plans, all constitute an essential condition for raising cooperation to the level of the implementation of the assigned tasks. Of course, here we can also have problems of jurisdiction. Thus, in regard to castings, forgings, parts, and readymade articles, the plan for cooperation can be made up to the level of central departments and of intergovernmental departments; while, for operational works, planning for cooperation is carried out by the executive committees of the district people's councils on the basis of requirements for and correct informations on free productive capacities to be received from the enterprises. So that consumers will be better acquainted with the possibilities and types of cooperation taken upon themselves by the productive enterprises, it would be valuable to draft specific nomenclatures for every kind of cooperation which will be distributed to all the enterprises in the district.

In the machine industry an important place with a great volume of skilled work, which is mainly linked with design, is given to the technical preparation of production from the construction and technological point of view. To implement this task, some study and design institutes have been created and are in operation, such as the Institute of Mechanical Studies and Designs, the Institute of Metallurgy and others and a great number of technological and construction bureaus attached to the production plants of the machine industry and a great number of technical and technological bureaus attached to the other production enterprises of the country, where thousands of trained cadres, specialists, technicians and creative workers are activated.

Today all these organisms work for designing machines, pieces of equipment, lines and complete projects; of course, this is done on the basis of a general guideline in regard to the activity of every one. Thus, for example, the designs of machines and pieces of equipment serving for the mechanization of work processes and which are produced in series are mainly executed by the technological and construction bureaus of the machine producing plants. The one-piece machines, which have served for the mechanization of work processes in the various enterprises, have been designed mainly by the technical and technological bureaus of these enterprises. The designs of machines for standard units and for their unification and standardization have been carried out by the Institute of Mechanical Studies and Designs. While the designing of machinery and equipment for the new projects, because of the complexity, difficulties and great volume of work, was done by work groups established for this purpose at the Institute of Mechanical Studies and Designs, the Institute of Metallurgy and so forth and at some technical and technological bureaus of large machine enterprises.

Such a guideline and work organization have produced positive results, especially, the execution of designs with work groups, where hundreds of production specialists have been activated; without the contribution of these specialists it would have been impossible to implement such a voluminous designing work with relatively short deadlines. Nevertheless, it must be admitted that construction and technological designing work of special machines or of complete projects has not preceded production properly and always; as a matter of fact, in some cases, it has been one of the reasons why the schedules for starting production have not been respected.

It is a fact that, despite continuing development every year, labor productivity in designing still remains relatively low. This situation has its source mainly in the little experience and insufficient training of the cadres concerned with the designing of machinery and equipment and, among other things, in the fact that at school they did not receive sufficient knowledge and did not gain practical experience in the execution of skilled and independent design, construction and technological work. However, some weaknesses and shortcomings in the organization and management of work have also had an influence on the relatively low labor productivity in design work; these include, the frequent changes of the participants in work groups. These frequent changes have been the cause for designers not to specialize in the use of groups of similar machines and not to adequately use the experience they had gained in previous designs in the designs that they executed later. Almost the same factors have been influential in the quality of designs which has not always been at the required level and in the fact that, in many cases, work has been aimed more at copying the existing machines, without thinking much about improving the construction and about the technical parameters.

The solution of these problems becomes especially acute when we confront the great tasks assigned to the machine industry in the Seventh Five-Year Plan in general and, within this framework, the tasks assigned to all study, research, experimental and mechanical design organisms. It is enough to stress that during this five-year plan the sectors under the jurisdiction of the Ministry of Industry and Mines alone require about 25,000 tons of machinery and equipment for the new projects and lines. And all these machines and pieces of equipment have to be designed from the construction and technological aspect. For their construction designing alone there will be needed more than 850,000 basic drawing forms. Therefore, it is obvious that there is a great volume of work that must be confronted by the designing sector from the qualitative and quantitative aspects.

In these conditions, the improvement of productivity and of quality of planning work is set forth before us as a priority matter; while, the main factor for us in achieving this has been and is the perfection of work organization, where we have the greatest reserve, a reserve which has not been properly utilized until now, as well as the possibility of improving productivity and quality of planning work in a relatively more rapid manner.

We believe that one of the ways to perfect the work organization which will improve labor productivity and quality would be the expansion of centralizing, profiling and designing forces according to the kinds of machines and according to their construction similarity. This centralization, profiling and specialization can be implemented in the special plants of the machine industry, in enterprises and in the Institute of Mechanical Studies and Designs. Thus, centralization of designs of all hydraulic machines, centrifugal pumps, water pumps and so forth can be expanded at the UMB [agricultural machine plant] in Korce; the designing of different agricultural machines at the UMB in Durres, Fier, Shkoder and Gjirokaster, distributing the work among them; the design of petroleum machinery at the petroleum plants; and the design of auto-tractor machinery at the "Enver Hoxha" auto-tractor combine; and so forth. Designing of these machines in series by the producing enterprises themselves, among other things, will make it possible to follow up and control the progress of production technology much better than until now to, improve the quality of designs and to continually reduce production costs of machines. While, designing of some kinds of standard machines used by all sectors of the economy, such as lifting machines, transporting machines and breaking machines, of pieces of equipment under steam and so forth and of nonstandard machines and pieces of equipment needed for the construction of new projects can and must be centralized on the level of the institute.

As shown by experience, centralization of designs improves specialization of designing cadres and creates conditions for raising standardization, typification, unification and quality of designs to a higher level. According to approximate studies, such an organization of design work would increase labor productivity 2-4 times and, consequently, creates the possibility for releasing a considerable number of people from designing work, people who could be engaged in the scientific organization and management of production. Such a concentration of designing work also creates more favorable conditions for increasing knowledge of and disseminating advanced experience on a broader scale and for implementing the new advances of science and technology.

To confront the very great needs of the production of many machines and pieces of equipment, it is essential, it was stressed at the Eighth Plenum of the Party Central Committee, that every technological bureau put itself in the role of the production manager considering itself as an unit with a special importance in the organization and management of production on scientific bases. It is important to correctly understand Comrade Enver Hoxha's recommendation that "the time now has come and opportunities have been created to think and work with greater perspective to design and produce new types of machines and pieces of equipment with technical and economic indicators and parameters that will respond to the present level of techniques and technology; we must not begin solely with the idea of producing that type which can be implemented and constructed more easily, which is not always the best and the most suitable" (Enver Hoxha, "The Progress of the Country Is Inseparable From the Development of Science and Technology," Pamphlet, p 20).

In the present stage of development of our science and technology, when almost every new initiative for technical progress in production stems from the technological bureaus, it is necessary that these bureaus be reinforced with more capable people and better organized, improving relationships between the number of workers with construction training and the number of workers with technological training in favor of the latter. The experience of the "Enver Hoxha" auto-tractor combine and of the agricultural machine plant in Durres and other things show that the design groups attached to the technological bureaus must be reinforced with production specialists who are a great support in regard to technological design and experimentation work.

Good experience has been gained in the study and design of new machine lines, units and plants. Through the work groups attached to the plants' technological bureaus, efforts have been made to study and draft the designs for the expansion of the plant for the production of instruments in Korce and the agricultural machine plants in Durres, Shkoder, Gjirokaster and elsewhere. However, the tasks assigned to this field are very great. The construction of a great number of new projects in the machine industry and the expansion and reconstruction with a more advanced technology of many existing projects require a voluminous study and designing work of high scientific and technical level. However, the execution on schedule and with good quality of these technological projects requires further improvement of work organization for their study and design. We stress this because of the fact that the technological projects designed until now have not always had advanced technical and economic indicators and, in certain cases, there have been violations of design rules. To eliminate these shortcomings, among other things, a bureau could be created at the Institute of Mechanical Studies and Design. This bureau would deal exclusively with these designs, closely cooperating with some work groups of machine plants on the specific problems. The organization of this bureau, undoubtedly, would increase labor productivity and improve quality in the design of new machine lines and plants.

Of course, the expansion and perfection of centralization, specialization and cooperation, as a condition for implementing the great revolutionary change in our machine industry, depends on many factors. However, as Comrade Enver Hoxha recommended, above all, it is necessary that the ideas of this problem be changed from the ministry down to the grassroots and be evaluated at the proper level by the party organizations, the scientific institutions, the economic and government organs, the technical and technological bureaus, the specialists and all the workers of the machine industry. On the basis of a new, wider concept and of a great evaluation of this problem, /other factors will be activated,/ everything which should be done will be thought of and will be scheduled, and work for executing programs will be properly organized.

9150
CSO: 2100/101

NEED FOR EXPANSION, IMPROVEMENT OF COMMUNAL SERVICES SEEN

Tirana RRUGA E PARTISE in Albanian May 81 pp 32-40

[Article by Valentina Leskaj: "Let Us Expand Communal Services, Improve Them and Make Them More Accessible to the Families"]

[Text] Because of the great role they play in the life of the people and because of the facilities they create for the families, communal services have continually received the attention of the party, of the state organs and of the mass organizations. During recent years, too, according to the party guidelines, a number of important measures were taken in order to respond in the best way possible to the quantitative and qualitative needs of the working people. As a result of these measures and efforts to implement the increasing tasks entrusted to the communal service workers, work in the communal sectors has been expanded and improved. This is also proven by the fact that in 1980, compared to 1975, the volume of adjustments and repairs increased 10.3 percent; the volume of communal services, 13.3 percent; the sewing of ready-made clothes, 29.8 percent; the repair and construction services, 29.4 percent and so forth; these percentages were, in general, higher than the increases in the growth of the population.

All sectors of communal services are working so that, as the Seventh Party Congress recommended, "The people will be served in a cultured and rapid manner and conditions will be created so that workers will not lose time in carrying out services and repairs" (Enver Hoxha, "Report to the Seventh Congress of the Albanian Workers Party," p 74). In implementing this recommendation, the Ministry of Communal Economy, the communal sections attached to the executive committees of the district people's councils and the enterprises of this system, insuring better and better the leadership of the party organs and of the basic party organizations, are establishing closer cooperation with the mass organizations, especially, with the organizations of the Albanian Trade Unions, the Albanian Democratic Front and the Albanian Women's Union. In order to correctly understand the communal problems and solve them completely, joint groups, aktivs and seminars have been organized with these organizations, as well as direct meetings with the people, at which meetings communal service workers have confronted social opinion and have been acquainted with the pluses and minuses of their work and with the thought and requirements of this social opinion and, afterwards, have set forth the tasks for improving work in these sectors.

However, we must admit that, despite the results achieved, there are still many problems in the field of communal services which require a better solution. The continuing improvement of the welfare of the people and of their cultural level is increasing more and more among other things, the demands for quality in the services and for making them as accessible to the families as possible, so as to save time especially for women concerned most with those family tasks many of which are closely and directly connected with the level of communal services. The recent analysis of these problems by the Ministry of Communal Economy are the General Council of the Albanian Women's Union disclosed a number of issues; we are treating some of them in this article.

During recent years, fruitful efforts were carried out in order to expand the network of communal services, increase the variety of communal services and make them as accessible to the families as possible.

In 1980 alone, 11 new communal enterprises and some other units attached to the existing communal enterprises were created and put into operation. The communal enterprise No 1 for artisan articles was established in Tirana and work is being carried out to make of this enterprise a school for all the artisan enterprises of the other districts. In order to serve the city and village people in the best way possible, some other enterprises with about 200 service activities are scheduled to be created in districts this year.

However, these data are too general; although they tell about an increasing and expanding development of communal services, they do not still concretely tell about these specific problems of this service, such as the range of the kinds of services carried out by the communal enterprises, the expansion of the network of services and making them as accessible as possible to the residential areas and so forth. A closer examination of the situation shows that, despite improvements in these directions, there still are many problems which require a more correct evaluation and greater efforts in order to solve them.

It is a fact that the increase of the kinds of services in some districts has been a component part of the expansion of the network of communal services. Thus, for example, today there are 100-110 kinds of services carried out in Tirana, Durres and Shkoder districts. However, we cannot say that the same concern has been shown in some other districts, such as in Puke, Kolonje, Mirdite, Mat and Tropoje districts and elsewhere, where only 60-65 kinds of services are carried out, some of the most necessary services are lacking, such as, among other things, the services for the sewing of quilts, for dry cleaning and so forth. And, this situation can neither be explained nor justified by "a lack of objective condition.. as one can hear from some cadres in these districts. Practice shows that with some more interest and determination, every district has the opportunity to further expand the range of the kinds of services, although, perhaps, initially, on a rather limited level from the viewpoint of expansion of some kinds of services.

The expansion of communal services in residential areas, especially, in villages, is a more complicated problem. It is a fact that now communal services in some small industrial and agricultural areas and, especially, in villages, are still very limited. As a result of the measures being taken, beginning this year, the district communal enterprises will expand their services activities in these small industrial and agricultural residential areas and in villages, with calculated steps, until the conditions for expanding their network of services have been created in these areas, too. For this, among other things, we can take as an example the experience of Korce and Shkoder districts and implement it everywhere; the communal enterprises of these districts dispatch, to small areas and villages, groups of specialists, including specialists in dyeing and soldering and so forth who receive suggestions and carry out various services for workers.

Another very important step would be to dispatch some kinds of services to the houses themselves; this action would greatly relieve the people of the difficulty of taking the objects they want to repair to the service centers themselves; it also creates the conditions for eliminating cases when these services are done in a private manner. The first steps in this direction have been taken. Thus, 80 percent of television and radio sets, washing machines, stabilizers and so forth are repaired at residences in Tirana, Durres, Elkbasan, Shkoder and Korce and elsewhere. In Tirana and in some other districts repair work is done at home, for example, mattress repair, furniture polishing, repair of some wood and metal articles and the repair of hydraulic equipment; and kerosene is sold in the apartments.

Of course, these achievements in executing some kinds of services in homes show, although it is only a beginning, that the possibilities exist for such an expansion. Certainly, the best and most complete use of these possibilities everywhere requires research work on the part of the state organs and communal enterprises so that the demands of the citizens will be better known and that the ways of implementing them will be determined more correctly. These organs must also eliminate the hesitation of some workers of the communal services enterprises to carry out services in the citizens' homes, because this hesitation is one of the reasons preventing some work from being carried out in homes, services such as carpentry, repairs of stoves and springs and other furnishings which people find it difficult to bring to the repair centers; therefore, sometimes people find incorrect ways of repairing them privately in their homes by different specialists. From approximate data, it appears that in Shkoder last year only 25 percent of the carpentry work was done in houses by communal sectors and 75 percent was done privately. The same situation occurred in Tirana, Durres, Vlore and so forth. We must emphasize that among specialists who hesitate and find all kinds of justifications in order not to go to perform services in houses, when they are sent by the enterprise, there also are people who eliminate every "hesitation" and have no "difficulty" at all in going to the houses of the citizens to carry out private work. This fact can be fully used to reject the baseless excuses of the communal enterprises for not performing some kinds of services in the houses of the citizens.

The maintenance services of state and private dwellings must be further expanded. By establishing special enterprises and sectors for this purpose, a noticeable improvement was achieved in keeping tens of thousands of state apartments and private dwellings in good condition. Nevertheless, communal enterprises must further increase their efforts to keep dwellings in good condition, responding more promptly to the requirements and needs of the people for their maintenance work.

The satisfying of the people's requirements for services, along with the increasing and expansion of residential areas, makes it essential to carry out a complete study of the people's needs for services and to strengthen and improve the educational, organizational and controlling work in order to eliminate those concepts and thoughts which divide communal services into small and big services and into more profitable or less profitable services. At a first glance, for example, the requests for selling pine twigs and wood chips for starting a fire at kerosene shops or for selling them together with firewood, seem unimportant. But, what emerges if one concretely analyzes the starting of a fire without pine twigs? It is known that, as a rule, to start burning wood in the stove one uses kerosene. How much kerosene does one need for this operation? It has been calculated that every family uses about 10 liters of kerosene each winter for starting fires at home; this means that a quantity of kerosene evaluated at about 11 million leks is spent [every winter] in all the country for this kind of operation.

Of course, this is a small example, but it shows that nothing should be treated as a "small" thing in communal services. The people need many kinds of services; for them they are "big" services and "small" services only in regard to the expenses required for their implementation; while, in regard to satisfying or not satisfying the requirement, every service they need has its own importance and, if this requirement is not fulfilled, it creates difficulties for them. Therefore, it is necessary for the workers of the communal services enterprises to listen attentively to the demands of the people for services and to implement them in the best way possible. They and, especially, women who in some enterprises of this sector compose the greater part of the collective, on the basis of the real demands of the people for services, must continually think of making suggestions about and of finding the possibilities for expanding the range of services and making them as accessible to the people as possible.

New possibilities have continually been created and are being created for improving the quality of services, and where these possibilities are used good qualitative indicators are achieved; this fact is accompanied by the increase of the demands of the people for these kinds of services.

It is a positive fact that the quality of services has been increased every year. Some tailoring centers in Tirana, Korce and Durres and some chemical cleaning and wood working sectors have especially distinguished themselves by work with good quality.

The combining and centralization of many small and very small services into large servicing centers is influencing the improvement of quality of some services. So far, 120 of such service units have been established and their number is continually increasing. Their establishment at the repair-clothing and footwear enterprise in Tirana has created possibilities for a more cultured and better organized service with better quality. Service activity with greater culture is also found in other units in various districts of the country.

Nevertheless, the problems of improving quality in communal services remain on the agenda as very acute problems, especially, in regard to the knitwear, quilt-working, tailoring, laundry-dyeing, and communal-dwelling sectors which are still far from responding to possibilities and to the demands of the customers.

In general, subjective causes are the basis of services of poor quality carried out by some sectors of the communal service. No kind of justification can cover the poor work done by some repair-clothing and footwear sectors where, in some cases, technical conditions are not implemented and, consequently, clothes are sewed with defects, sizes of models are not respected and, even sometimes, people go so far as to spoil the material brought by the client. Also, no "objective" reason can absolve such shortcomings as those at the knitwear center in Shkoder where knitwear is given to clients unwashed and not ironed or at the quilt-working center in Tirana where quilts are kept in dusty places.

More efforts are required today in regard to improvement of quality of services and to keeping dwellings in good condition, such as efforts to place and repair plumbing installations to plaster and paint houses, to lay slate and tiles and so forth, whose quality depends both on the level of training of workers of the communal service enterprises and on the quality of raw materials and materials supplied to these enterprises.

Without reducing the degree of responsibility of the communal enterprise workers in regard to the poor quality of some of these services, we must stress the fact that many enterprises for the production of raw materials, although the kinds and quality of the materials to be supplied to the communal enterprises are specified in their contracts, do not respect them. This also happens sometimes with a government department. The housing communal enterprise in Shkoder, for example, needs cement of the "400" brand for the production of prefabricated elements which, according to the plan, has to be supplied by the cement plant in Shkoder, when it is known that this plant does not produce this brand of cement. The use of poor quality cement will inevitably influence the quality of prefabricated products, just as the supply of communal enterprises with plumbing materials of poor quality, with lime not properly burnt, with tiles that break as soon as laid down and so forth will influence the quality of services and repairs.

Every citizen has the right to ask for good quality services, just as it is his duty to produce with good quality everything which the people need, including those products and raw materials used by communal enterprises.

However, poor quality work done in some servicing centers has its roots in some aspects of liberalism and indifference, in the lack of control and in the lack of requirement for reporting observed in the leadership organs of the communal enterprises in regard to the work and products of their workers and in regard to the quality of materials and raw materials received by these enterprises from other sources. Still much remains to be done in these two directions. Can one say that control and requirement for reporting are in order in general and, particularly, in regard to the quality of the services, when there are cases, for example, like that of the communal enterprise for the repair of clothing and footwear in Tirana which during the first 9 months of 1980 had exercised quality control only over 6,048 services, while, during the same period the knitwear sector alone of this enterprise had carried out about 45,000 services? Deceiving is the requirement for reporting among the workers themselves of these sectors who, some more and some less, must make every foreign manifestation and attitude in work the object of their analyses and debates.

Rightfully, the citizens have their demands in regard to the quality of services and a whole healthy social opinion exists in this direction. The task of all party levers in the communal enterprises is not only to know, but also to thoroughly evaluate these requests and this opinion and, by judging the real situation of work in enterprises, sectors, units and various sections, to implement collectively and separately, according to their specification, the educational, organizational, technical and administrative measures which assure success in work.

From many analyses done, it appeared that the main factors determining the quality of services have been and are the level of self-knowledge and the level of professional skills of the workers of this sector. Therefore, both those cases of pursuit of personal interests manifested in some workers and expressed in their tendencies to fulfill and overfulfill norms to the detriment of the quality of work and of services and those cases of poor quality services because of the low educational, technical and professional level of many workers, must greatly disturb all the party levers in the communal service enterprises. In order to change the situation, where 80 percent of the workers have middle education, it is necessary to better evaluate schools and courses without interruption of work and to better organize their attendance. It is particularly the work in training courses that needs qualitative improvement. We stress this fact because, for example, the tailoring establishments in Berat have had the same schedule for some consecutive years and even this schedule is repeated several times with the same workers; while, in Vlore, Lushnje, Sarande and Mat courses are attended by few participants. The insufficient efforts of some workers of the communal enterprises to improve their technical and professional level is negatively influenced by the concept "I have a profession, what do I need school for." However, along with the measures which must be taken to improve work quality in these fields, it is necessary for the leadership organs of the communal enterprises to be more demanding in regard to the acceptance of new workers so that the workers who start work now in the sectors of these enterprises will have at least the required educational level.

The good work being done now by the communal enterprises is also expressed in accelerating the deadlines for the service. It is important to consider some electrical and hydraulic services, as emergencies, to observe prearranged schedules for painting, and to have a better organization of work for some occasional cases of repairs and so forth.

Nevertheless, we cannot say that this problem is fully solved, because in some sectors of the communal-housing enterprises and in some sectors for knitwear articles and special tailoring, deadlines for the execution of services are often prolonged up to 2-3 months. The distribution of wood, too, sometimes takes up to a month to be carried out. There are violations of deadlines in housing maintenance. The government has allocated funds for the maintenance of dwellings and has set the deadlines for controlling and servicing; however, some sectors entrusted with the maintenance of dwellings do not always show proper care for them; consequently, it happens that windows rot because of the failure to paint them on time and walls crack and plaster falls down as a result of the depreciation of plumbing.

All possibilities have been created for the communal enterprises to plan and to execute on time the necessary services and repairs in this great treasure entrusted to them to keep in good condition, on the basis of information received from the citizens and by exercising a systematic control, and to eliminate all the cases that can damage it. And the possibilities for implementing services on schedule, especially when deadlines are set by the service sector itself, exist for all services and repairs.

In regard to respecting servicing deadlines, as an essential condition for passing to the stage of accelerating them, two priority problems emerge--problems which must be emphasized more--the strengthing of proletarian discipline in work and improvement of work organization, especially in the small organization.

It is a fact that during 1980, the communal system workers had 17,000 days of unjustified absences and temporary work disability in some enterprises of this system was 6 percent. It is a known fact that many workers of the communal services do not use their 8-hour shift for effective work; on the contrary, they roam about in clubs; and there are many among them who sometimes use a part of their 8-hour shift for doing private services. And, it is precisely this situation which gives priority to the necessity of strengthening work discipline, as an essential condition for implementing services on schedule, for respecting their deadlines.

Of course, intensification and qualitative improvement of concrete educational work with the objective of increasing the sense of responsibility in every worker in regard to the task entrusted to him by society, has been and is the main path for strengthening work discipline. However, this educational work would produce desired results if it is accompanied and supported by measures aimed at perfecting work organization and at strengthening control. We stress this because, despite some measures adopted in the recent years for perfecting work organization, there are still shortcomings and weaknesses in this field; they create favorable terrain for the violation of work discipline and, often, are the main reason for the failure to implement services on time and with required quality. From some recent inspections, it has been learned that, in many cases, workers are not assigned work objectives on time nor are their materials given on time. During repair activities, works are distributed for several projects and, consequently, for some of these projects works are delayed. In some enterprises, control links are weak. For example, the quality controllers and cashiers are absent; there are cases when materials and, even, money are kept by workers themselves. The distribution of specialists and of new workers is not done everywhere in a studied manner, on the basis of the norms for work assignment and so forth. For example, in 1974 City Quarter No 1 in Tirana had one technician for 1,500 apartments; today it also has one technician, while the city quarter has 4,400 apartments.

The communal sections attached to the executive committees of the district people's councils can be more influential in improving work in these directions. The workers of these sections are obliged to make responsible and help the workers and cadres of the enterprises of this sector which they supervise and those of the other enterprises which have obligations toward the first ones.

Close cooperation and coordination of activities between the communal enterprises and the mass organizations is very important for the correct and timely settlement of many problems of the communal services. There are some problems of this sector which can be solved in the best way possible only on the basis of this cooperation. Just as until now issues, such as the maintenance of dwellings and of the intermediate places outside them, the hygiene and greeneries of the intermediate places and the struggle against the manifestations of lack of discipline among some communal workers, against poor quality work and against the exercise of private professions, all can and must become the objects of this cooperation and coordination and of the forces and of their joint activity.

The women's organization of Zone No 3 in Tirana and those of Berat, Korce, Mirdite, Lushnje and other districts have frequently organized social control and confrontation meetings with the workers of the communal services to discuss the problems concerning good maintenance of dwellings and the common environment, the economical use of water and of electric power, the use of all attenuating conditions which the communal service guarantees and so forth. The Democratic Front organizations have also been broadly activated in problems of this nature.

Nevertheless, there are still problems which must attract more the attention of these mass organizations. Among other things, the social activities of these organizations can be a great influence, especially, in increasing the citizens' concern for the proper use of dwellings and eliminating every case of carelessness and of uncultured activities which lead to the deterioration of boards, plumbing and electrical installations, stairs, walls and of the environment around the dwellings. Despite the efforts and initiatives undertaken by the organizations of the Albanian Women's Union and the Albanian Democratic Front, still, in some cases, work is not systematically done everywhere in regard to the cleanliness of common areas and in regard to the creation of a milieu always clean and cultured. This happens because some citizens still preserve the concept "those are matters concerning the communal service and it must look after them." Expenditures made by the state for the service sectors, especially, for keeping dwellings, streets, water mains and so forth in good condition are considerable. To take care of their use in a proper manner and to contribute to keeping them in good condition is as much the expression of the cultural level of everyone as the implementation of an individual obligation toward society.

The year 1981 is also a year of great work for the workers of the communal enterprises. In comparison with 1980, services, repairs and works on order will increase about 11 percent. Great amounts of work will also be carried out in regard to the construction of canals and water mains, asphalting of streets, greenery and embellishment of residential areas, expanding of beaches and so forth. Executing these works requires, first of all, the greater mobilization of the workers of the communal services and, especially, their comprehensive efforts in order to put every service and work on the healthiest scientific bases, an action which constitutes the basic factor for knowing and implementing the increasing demands, for improving quality and for respecting deadlines. However, in regard to the role that the communal services play in our life and in regard to the necessary influence to be exercised by all the people in the fulfillment of these services on time, the creation of a healthy social opinion and the mobilization of the working masses in solving the communal problems constitute another important work problem for the party organs, the basic party organizations, the government organs and the mass organizations.

9150
CSO: 2100/102

PLAN FULFILLMENT REPORT FOR FIRST HALF OF 1981 PUBLISHED

Bratislava PRAVDA in Slovak 29 [illegible] 81 p 3

[Excerpt from the report by the Slovak Bureau of Statistics: "Development of National Economy and Fulfillment of the Plan in the First Half of 1981 in the SSR and CSR"]

[Text] Excerpt from the Report by the Slovak Bureau of Statistics

According to preliminary results for the first half of 1981, the major part of the objectives stipulated by the state plan of operations have been fulfilled.

Industry

As compared with the same period of 1980, the volume of total deliveries of goods increased 3.4 percent and deliveries to cover final needs rose 3.9 percent. On the whole, the timetables of enterprises were met. The most dynamic growth was noted in deliveries for exports to the socialist states, up as much as 10.6 percent, while exports to the nonsocialist states remained on the 1980 level. Deliveries for investment increased 8.3 percent, for domestic trade 3.3 percent, and for consumption in production 3.3 percent.

Deliveries for domestic trade at retail prices increased Kcs 985 million in the first half of 1981 as compared with the same period in 1980, of which consumption products of machine engineering accounted for Kcs 47 million and products of the food industry Kcs 722 million.

Based on the implementation of the principles stipulated by the Set of Measures, adjusted value added is being applied since the beginning of the current year in the industry as the criterion for the assessment of labor and material incentives. Their volume, which amounts to Kcs 29.8 billion, represents 48.3 percent of the enterprise plan for the year.

Production in the centrally planned industry in the SSR was 3 percent above the first half of 1980, and average daily production increased 3.8 percent, after consideration of the effect of continuous operations.

In volume of production, enterprises overfulfilled 0.4 percent, i.e., Kcs 354 million, however, 53 enterprises underfulfilled their planned tasks Kcs 566 million.

The coal industry produced 2.86 million tons of brown coal and lignite. The enterprise plan was fulfilled 100.8 percent and the annual task 50.4 percent.

Electric power generation increased due to continuous operations in the nuclear power plan which in the first half of the year generated 3,019,000,000 kWh electricity, sharing 28.7 percent of its total production.

Metallurgical production increased 5.8 percent, in particular by more comprehensive exploitation of the capacities in the East Slovakia Iron Works and in new operations.

Production in general engineering rose 5.4 percent, of which electrical engineering accounted for 8 percent, heavy engineering 6.3 percent, and general engineering 4.6 percent. The machine engineering industry increased the deliveries of its products for export by 9.3 percent as compared with the first half of 1980. The share of the advanced sectors of production--especially electrical engineering--was enhanced in the structure.

The volume of production in the chemical industry declined slightly in accordance with the objectives of the plan. The rubber industry increased its production 4.2 percent. Production in the chemical and oil-processing industries declined 4.5 percent because it focused on better and more comprehensive utilization of petrochemical raw materials.

The wood-processing industry increased its production 2 percent, and the cellulose and paper industry 5.7 percent, while the wood-processing and furniture-manufacturing industries failed to meet all the tasks of the plan.

Production in light industry rose 3.8 percent, however, the line of its consumer products has not been updated to a desirable extent. Growth was more dynamic in the textile industry (4.4 percent) and in the shoe-manufacturing industry (4.3 percent); production in the glass industry rose 2.1 percent and in the garment industry 3.7 percent, but declined 0.4 percent in the polygraphic industry.

The industry of construction materials raised its production 2.8 percent, which made it possible to satisfy the needs of our national economy.

The production of the food industry rose 4.3 percent, of which 2.2 percent was in the dairy industry, 2.1 percent in the meat-processing industry, 7.1 percent in the bakery industry, 11.5 percent in the wine industry and 3.6 percent in the brewery industry.

In adjusted value added, labor productivity was 3.2 percent above the first half of 1980 and accounted for two-thirds of the increase of value added. The timetable for labor productivity was fulfilled 100.8 percent. The average wage of industrial workers in the SSR amounted to Kcs 2,695.

Industrial development was enhanced by the increase of 11,000 workers whose number rose to 688,000.

Agriculture and Forest Economy

Agricultural crops were cultivated on an area of 1,526,600 hectares. The uncultivated and unplanted areas amounted to a total of 6,894 hectares, which is 37.6 percent less than last year. Most of the uncultivated and unplanted areas consisted of lands temporarily reserved for recultivation, amelioration and other types of construction programs (gas pipelines, electric lines, etc) and waterlogged lands.

Grain crops were cultivated on 885,500 hectares, which is nearly 35,000 hectares less than in 1980, and 32,000 hectares below the plan. The acreage of grain crops, including maize, was reduced by 26,000 hectares, and the area of legumes by 9,000 hectares.

Animal production achieved several favorable results in utility value and in the manufacture of products. As concerns replacement of livestock in the socialist sector, hog-raising was slightly up, while calf-raising declined; 56.3 calves were raised per 100 cows, and 8 pigs per sow, however, the results of lamb-raising in sheep farming were low. All sectors averaged 1,536.4 litres of milk per cow, i.e., 13.2 liters more than in the first half of 1980, with total milk production up 14.8 million liters to 783.6 million litres.

The achievements in the manufacture of animal products beneficially affected the development in the market production for state funds. Furthermore, the tasks planned for the procurement of basic types of animal products were fulfilled in the structure, with the exception of slaughter calves. Deliveries above the plan included 1,300 tons of slaughter cattle, 2,000 tons of slaughter hogs, 69 tons of slaughter sheep, 144 tons of slaughter poultry, 3 million liters of milk and 5.7 million eggs for consumption.

As compared with the first half of 1980, an additional 13.4 million liters of milk and 19.1 million eggs for consumption were procured. In agreement with the tasks of the plan, the procurement of slaughter poultry was down 1,700 tons.

The state forest economy produced almost 2,875,000 cubic meters of timber, i.e., 5.1 percent more than in the first half of 1980, and 55.6 percent of the plan for the whole year. The state forest administration fulfilled 51 percent of its plan for the year by delivering more than 2.48 million cubic meters of lumber. Forests were planted on more than 15,000 hectares, of which 5,000 hectares were on unforested lands.

Construction and Transportation

The production for construction was unable to overcome the imbalance in the work schedule and to meet the planned structural and material standards of works. One of its positive aspects was more thorough concentration of its capacities on mandatory construction projects, where the planned tasks were overfulfilled 3.7 percent, however, the fulfillment of the plan in individual construction projects was uneven.

The contracting construction organizations delivered projects in the total amount of Kcs 13.3 billion, i.e., Kcs 457 million above the same period in 1980. The tasks planned for the volume of production in the branch of basic constructions were fulfilled 95.9 percent, and in construction organizations of the Ministry of Construction of the SSR, 95.5 percent.

The average monthly wage of construction workers amounted to Kcs 2,793. The relations between the growth of labor productivity and the average wage developed adversely.

Public freight transport hauled 129.4 million tons of goods and raw materials, i.e., 4.3 more than in the same period of 1980. The transport plan was fulfilled 101.3 percent. Railroad transport accounted for 47.8 percent, and highway transport by the CSAD [Czechoslovak Automobile Transport] 50.9 percent in total transport.

Railroad freight transport hauled 61.9 million tons, which is more than in 1980, but less than stipulated by the plan. Railroad loading reached a volume of 33.4 million tons, i.e., 0.6 percent more than stipulated by the plan and 1.4 percent more than last year.

Highway freight transport of the CSAD overfulfilled its 6-month plan by more than 2 million tons. The transported goods and raw materials amounted to 65.9 million tons, or 8.3 percent above the same period in 1980.

River transport shipped 1.6 million tons of goods, i.e., 14.1 percent more than in the first half of 1980.

In accordance with the plan, the branch of communications fulfilled the tasks of automation and modernization of the relay network, including increases of telephone units; 24,300 telephone units were installed, 4,900 of them in housing units. There were 577,000 telephone units in the SSR at the end of the period under discussion.

Development of Some Basic Factors in the Growth of Production

Further growth of employment also contributed toward higher creation of material resources. The average number of workers in the socialist sector of the national economy (not including united agricultural cooperatives) increased 1.5 percent over the first half of 1980, i.e., to 1,929,000 persons. In addition, 105,000 women were on maternity leave. The share of working women in the total number of workers was 45.1 percent.

The average monthly wage in the organizations of the socialist sector of national economy (not including the united agricultural cooperatives) rose 1.7 percent to Kcs 2,608.

The volume of works and deliveries achieved in capital investment amounted to Kcs 199 billion, which is 41.4 percent of the plan for the year. More favorable results were noted in mandatory construction projects with an actual 45.5 percent of the state plan. Due to uneven fulfillment of the plan, insufficient supplies and certain other problems, the volume of works and deliveries fell 3 percent below that of the first half of 1980.

In overall housing construction, the volume of works and deliveries fulfilled was Kcs 3.1 billion, i.e., 44 percent of the plan for the year.

Institutes of the research and developmental base in the SSR employed 51,000 individuals. The state plan for technological development consists of 116 tasks. There are problems with the solution of 16 tasks, 2 of which are scheduled for completion in the fourth quarter. Three tasks were resolved. The tasks of the state plan for technological development have not been implemented to satisfaction. The number of tasks scheduled for implementation was fulfilled 88 percent.

With overall costs slightly lower, favorable results were achieved in reducing material consumption. As compared with the same period of 1980, the share of the material costs without depreciation and of services of nonmaterial natures per Kc of performance declined by halir 0.61, of which in the main component of material costs--material consumption--by halir 1.46. Nevertheless, the share of wage and other personal costs, as well as of financial costs per Kc of output, has increased.

Living Standard

As compared with the first half of 1980, cash incomes of the population rose 3.2 percent to Kcs 53.3 billion. Incomes from wages were up 3.6 percent, and social income 1.2 percent. The rate of growth of social incomes decelerated particularly because of a lower birth rate and the ensuing reduction of population incentives.

Cash expenditures by the population rose 2.2 percent, with higher bank deposits and cash on hand than last year. Payments for services increased 4 percent.

In the first half of the year, retail turnover of the main trade systems amounted to Kcs 31.8 billion, or 1.3 percent more than last year.

As for industrial products, consumers were more demanding as concerns quality and utility values of goods.

The housing fund was further expanded by the completion of 8,400 housing units, however, this represents only 19.7 percent of the plan for the year. The principal contracting organizations of the Surface Construction economic production unit fulfilled 53 percent of their tasks for completion of housing units in the 6-month period, with a shortfall of 4,400 housing units. The Surface Construction branches in Bratislava and Nitra were the only ones to meet the plan. The number of housing units completed in the krajs of Central Slovakia and Eastern Slovakia was low. In Bratislava, the capital city of the SSR, 1,647 housing units were completed, i.e., 38.3 percent of the plan for the year. Construction of 14,400 housing units was launched, 9,100 under contract and 5,300 housing units by self-help programs.

Almost 240,000 children were placed in nursery schools as of 31 March 1981, which is nearly 82 percent of the total number of children aged 3 to 5 years, and 10,000 more than in the same period of 1980.

Academic high schools, secondary vocational and professional schools (without the superstructure types of study) admitted 31,700 students, and 5,388 students were registered in secondary vocational schools in courses of study with examination of maturity.

Our national economy requires that 13,500 candidates, or 16.9 percent of the population born in a particular year, be admitted to institutes of higher learning. More than 23,000 candidates applied.

In order to offer our population better health care, all health institutions expanded their bed capacity to almost 54,000 beds, of which more than 35,000 were in hospitals and lying-in hospitals, and 10,600 in institutes for balneological therapy. As compared with the first half of 1980, the number of medical personnel increased 3.6 percent, with outpatient care accounting for 2.5 percent.

The number of places available in daycare centers increased 2,263 to a total capacity of 42.178 places.

There were 17,000 marriages, or 1,200 below the level of the first half of 1980. Live births declined 1,800 to a total of 47,000, and 25,000 citizens died, which is down 1,700. Therefore, the natural increase of 22,000 remained basically on the level of the same period of 1980.

At the end of June 1981, the SSR had 5,013,000 citizens, which is 32.7 percent of the total population of the CSSR.

Excerpt from the Report of the Czech Bureau of Statistics

In the first half of 1981, the national economic achievements on the territory of the CSR demonstrated positive trends in the creation of material resources and in the development of certain factors affecting efficiency standards.

The volume of industrial production rose 1.3 percent above the first half of 1980. In agreement with the objectives of the plan, priority was accorded especially to the development of production in electrical engineering and some other branches based on processing of domestic raw materials.

The plan for production of goods was fulfilled 100.5 percent, and 49.9 percent of the volume planned for the year was achieved. Planned production was not met by 18 VHJ [economic production units] and 90 enterprises.

Deliveries by industrial enterprises on the territory of the CSR for domestic market at retail prices were 1.4 percent below the first half of 1980. Their planned volume was fulfilled 104.2 percent. All ministries fulfilled their planned deliveries. Deliveries for export to the socialist countries in prices quoted as "all charges paid to border" fell 2.3 percent below the first half of

1980, and their planned volume was fulfilled 112.4 percent. Deliveries for export to the nonsocialist countries increased 6.5 percent and the plan was fulfilled 109.4.

As compared with the same period in 1980, production in heavy engineering rose 0.4 percent, in general engineering 2.6 percent, and in electrical engineering 4.7 percent.

Due to aggravated geological conditions, the total volume of production in the coal-mining and coal-processing industries declined 1.5 percent as compared with the first half of 1980, while the production of gas and resins increased 3 percent. Produced were 14 million tons of bituminous coal, i.e., 3.3 percent less than in the first half of 1980, and 45.1 million tons of brown coal and lignite, i.e., 2.4 percent more than in the same period of 1980. The plan for the production of bituminous coal was fulfilled 100.2 percent and 101.3 percent for brown coal and lignite. Heat and power generation fell 1.2 percent below the first half of 1980.

As compared with the same period last year, the chemical industry increased its deliveries for the domestic market by 1.2 percent, for export to the socialist countries by 22.3 percent, and to nonsocialist countries by 23.8 percent.

The wood-processing industry focused on more economical utilization of that vital domestic raw material, particularly by fully utilizing the capacities newly put into operation at the end of the Sixth Five-Year Plan. In accordance with the plan, deliveries for the domestic market were 2.3 percent below the same period of 1980.

Light industry fulfilled its demanding tasks in deliveries to the domestic market and for export. Light industry increased its deliveries for the domestic market 0.2 percent over the same period in 1980.

Deliveries of construction materials for the domestic market rose 3 percent over the first half of 1980.

The production in the food industry developed in accordance with the supply of raw materials from our domestic agricultural production and from imports. Deliveries of food products for the domestic market increased 3.8 percent over the same period of 1980.

Labor productivity was up 2.6 percent as compared with the first half of 1980, and its planned level was exceeded. The growth of labor productivity contributed 64.6 percent of the total increase in industrial production on the territory of the CSR.

The volume of construction work performed by internal labor resources of the CSR-based construction enterprises was 2.6 percent below the first half of 1980, and the plan was not fulfilled. The volume of construction work was not met by 107 of the 145 CSR-based enterprises.

In agriculture, the plan for the cultivation of grain crops was fulfilled 98.1 percent, wheat accounting for 96.5 percent, barley 96.6 percent and rye 102.6 percent. Legumes were cultivated on 87.2 percent, and sugar beets on 99.6 percent of the planned acreage; potatoes were planted on 101.3 percent of the planned areas. Procured were 575,000 tons of slaughter animals (not including poultry), i.e., 6.2 percent more than in the first half of 1980. Procurement of slaughter poultry amounted to 75,000 tons, i.e., down 2.9 percent, of milk to 1,833,000,000 liters, i.e., down 2.9 percent, and of eggs to 999 million, i.e., up 2.4 percent.

The forest economy produced 6.8 million cubic meters of timber and fulfilled 54 percent of its plan for the year.

As compared with the same period of 1980, railroad loading on the CSR territory increased 2.5 percent and the plan for the 6 months was overfulfilled 0.2 percent. Highway freight transport by the CSAD hauled 4.9 million tons, i.e., 4.8 percent more substrates than in the first half of 1980. Autobus transport of the CSAD carried 8.8 million passengers, i.e., 1.3 percent more than in the same period of 1980. Municipal mass transid systems transported 1.16 billion persons, i.e., 1 percent more than in the first half of 1980. River transport of the Czechoslovak State Labe-Oder River Navigation Lines transported 0.4 million tons, i.e., 11.1 percent more goods than in the first half of 1980. The amount of coal hauled on the Labe River for the Chvaletice power plant rose 25.2 percent.

The CSR national economy completed investment projects and deliveries (not including Action Z, construction programs undertaken by citizens, etc) in the amount of Kcs 36.1 billion. The volume of construction work was down 0.2 percent and the deliveries of machinery and equipment 10.4 percent below the same period of 1980.

Total cash incomes of the population increased 2.1 percent over the first half of 1980, of which wage incomes accounted for 2.5 percent and social income 1.3 percent. A worker in the socialist sector of national economy earned an average monthly wage of Kcs 2,650, i.e., Kcs 49 more than in the first half of 1980.

The Czech State Savings Bank granted 6.7 percent more loans to the population than in the first half of 1980. In particular, the volume of loans for purchase of goods increased. Loans granted by the state to newly married couples amounted to Kcs 751 million and state benefits granted to the newborn amounted to Kcs 160 million.

Savings deposited by citizens in the Czech State Savings Bank increased Kcs 3.9 billion since the beginning of the year. This was Kcs 1.7 billion more than in the first half of 1980. Total deposits as of the end of the June amounted to Kcs 112.9 billion, i.e., Kcs 10,957 per CSR citizen.

Retail turnover of main trade systems increased Kcs 152 million at current prices, or 0.2 percent, as compared with the same period of 1980. The turnover in the trade network remained at approximately the same level, and in public dining increased 1.6 percent. In the first half of the year retail turnover fell 1 percent below the plan.

All types of construction programs planned by national committees completed 16,792 housing units, i.e., 23.1 percent less than last year, and fulfilled 25.8 percent of the plan for the year. This proves that progress in the fulfillment of the plan for the year was less dynamic than last year because the share for the first 6 months of 1981 represents 28.2 percent of the housing units to be completed in 1981. Before the end of June, construction of 24,873 housing units began, i.e., 8.1 percent less than in the first half of 1980.

The population developed less favorably than last year. During the first half of 1981, there were 74,000 live births, i.e., 7,000 less than in the same period of 1980. There were 35,000 marriages and 13,500 divorces. Natural increase of the population amounted to 9,000 persons, i.e., almost 1,000 below the first half of 1980. As of the end of June, the CSR had 10.3 million citizens.

9004
CSO: 2400/295

FIRST HALF 1981 ECONOMIC DEVELOPMENTS SUMMARIZED

Prague HOSPODARSKE NOVINY in Czech 31 Jul 81 p 2

[Report by the Federal Bureau of Statistics: "Report on the Fulfillment of the Plan for the First Half of 1981"]

[Text] During the first half of the current year the following results were achieved in the development of the national economy:

During this period enterprise plans were surpassed in industry in all sales indicators, in the volume of industrial production as well as in adjusted value added; in agriculture, the timetable for the procurement of all basic animal products was surpassed; in public freight transport, the total planned transport tasks were surpassed. During the first half of 1981, the construction industry failed to meet its enterprise plans in indicators of construction production and in adjusted value added; furthermore, retail sales of main trade systems remained below the planned level. In foreign trade, the share in the state plan for the year achieved during the first half of 1981 in general was higher in exports than the actual result for all of 1980, and lower in imports.

In general, during the first half of the year the state plan for the year was fulfilled 49.6 percent in the volume of industrial production, 45.3 percent in construction work performed by internal labor resources, 50.4 percent in the procurement of slaughter animals, including poultry, 44.9 percent in total imports, and 47.7 percent in total exports. With the exception of the construction industry, the results achieved in the first half of the year, converted to a comparable number of workdays, are essentially in agreement with the objectives of the plan.

As compared with the same period of 1980, the volume of industrial production in centrally planned industry increased 1.8 percent and the average daily production 2.6 percent. The state plan envisaged a 2.4 percent increase for 1981. In the first half of the year, enterprise plans for the volume of industrial production were fulfilled 100.3 percent. However, 23 percent of the enterprises failed to meet their planned tasks. During the first half of 1981 the most dynamic growth in volume of production was achieved, and enterprise plans were overfulfilled, in electrical engineering, in the rubber industry, in the cellulose and paper industry, and in the glass, ceramic and porcelain industry. The sum total of enterprise plans for adjusted value added was overfulfilled 1.3 percent in the first half of the year. Labor productivity in centrally planned industry, calculated on the basis of the volume of industrial production and converted to a comparable number of workdays, increased 2 percent in the first half of the year over the same period of 1980; the state plan for 1981 envisaged a 2.1 percent growth.

In sales of industrial products (at wholesale prices), deliveries for exports to socialist countries increased 0.8 percent over the first half of 1980, deliveries for exports to the nonsocialist countries 0.1 percent and deliveries for the domestic market remained on the same level as in the first half of 1980. Deliveries for consumption in production and operations increased 1.4 percent during the 6-month period. In accordance with the objectives of the plan, the volume of machinery and equipment delivered for current construction projects declined 1.7 percent. All indicators specified for investment control of the fulfillment of the plan were met during the first half of the year by about 50 percent of all organizations for which they had been stipulated.

In agriculture, 6.7 percent of the planned grain-growing areas were harvested as of 13 July. In the second crop of acreage planned for cultivation of multiannual fodder crops on arable lands, 36.3 percent were harvested, as were 9.7 percent of the planned meadow areas. On the planned acreage, the harvest of 19.9 percent of winter rape and 39.7 percent of early potatoes was completed. In the first half of the year, livestock inventories remained on approximately the same level as during the corresponding period of 1980. During the first half of 1980 [sic] in animal production the procurement of slaughter animals, including poultry, increased 3.3 percent, and of eggs 3.2 percent, while the procurement of milk declined 1.6 percent. In comparison with the same period of 1980, the procurement of slaughter animals, including poultry, was 29,600 tons higher, of milk 41 million liters lower, and of eggs 42.5 million higher in the first 6 months of this year.

In construction, during the first half of the year construction enterprises performed construction work by internal labor resources in the value of Kcs 36.4 billion, which is 3.9 percent less than specified for this period in enterprise plans, and 2.8 percent less than in the first half of 1980. Average daily production in the construction industry declined 2 percent as compared with the same period of 1980. Planned production has not been fulfilled by 75 percent of construction enterprises. In addition, construction projects have not been fulfilled in capital investment. In the 6-month period, enterprise plans for adjusted value added were fulfilled 98.5 percent. In the first half of the year, construction projects delivered by contractors amounted to 15,742 housing units, i.e., 22.8 percent of the state plan for the year. In view of the planned objectives, the development of labor productivity was also unfavorable, as it declined 2.3 percent as compared with the same period of last year. As compared with the first half of 1980, the number of workers in construction enterprises declined 0.5 percent and their average monthly wage increased 0.8 percent.

Investment work and deliveries performed (not including Action Z and the citizens' programs) amounted to Kcs 56 billion, which is 2.6 percent less than in the same period of 1980. The volume planned for the year was fulfilled 41 percent, of which 42.2 percent in construction works and 39.4 percent in deliveries of machinery and equipment. The shares in the state plan for the year were more favorable in construction projects with more than Kcs 2 million of budget costs and in construction projects designated as mandatory tasks.

In the first half of the year, public freight transport hauled 321 million tons of goods, of which railroads accounted for 142.5 million tons. In the first 6 months of the year, the planned transport tasks were fulfilled 101.5 percent, in railroad transport 99.4 percent, in transport by CSAD [Czechoslovak Automobile Transport] 103.3 percent and in river transport 100.1 percent. The total volume of the hauled goods was 3 percent higher in the first half of 1981 than in the same period in 1980. The planned tasks were overfulfilled in railroad loading which increased 2.1 percent over the same period of 1980. The average turnround of a car unit developed adversely in the first half of the year, amounting to 4.18 days (as compared with the planned 4.06 days).

In foreign trade (at current prices), the rate of growth of exports in general as well as regards the nonsocialist countries developed more dynamically than that of imports. The turnover in foreign trade with the socialist countries increased more rapidly than that with the capitalist states. The total turnover in foreign trade was 6.3 percent higher than in the first half of 1980, of which that with socialist countries was 9.4 percent higher. Exports increased 7.9 percent, of which those to socialist countries increased 9.3 percent, and imports 4.6 percent, of which those from socialist countries increased 9.3 percent. As compared with the same period of 1980, goods exchanged with the CEMA members countries were up 8.5 percent, of which goods exchanged with the USSR increased 13.3 percent.

In domestic trade (at current prices) main trade systems in the first half of the year sold goods in the amount of Kcs 101.1 billion, which is 0.6 percent more than in the first half of 1980. Main trade systems fulfilled their enterprise plans for higher retail sales by 99.2 percent; footwear stores surpassed their enterprise plans most conspicuously--by 3.6 percent. According to the estimate, the transactions in all trade systems during the first half of the year amounted to Kcs 120.2 billion, i.e., 0.2 percent more than in the first half of 1980. The state plan for all systems stipulated a 2.4 percent increase for the whole year of 1981. The rather unsatisfactory structure in the supply of goods and the declining interest of consumers in purchasing certain types of products resulted primarily in slower dynamism than envisaged in the plan.

In the first half of 1981 the cash income of the population, which amounted to Kcs 176.8 billion, increased 2.4 percent as compared with the same period in 1980. Incomes from wages accounted for Kcs 2.9 billion, and social incomes Kcs 0.4 billion, in the increment of the population's cash income.

Actual cash expenditure of the population increased 1.2 percent.

Deposits made by the people and their cash on hand increased Kcs 9.8 billion.

As of the situation on 30 June 1981, the currency amounted to Kcs 44.98 billion.

Basic Indicators of National Economic Developments in June 1981

Increases over comparable period in 1980 (in percent).

	June	January - June	State Plan[1]
Deliveries by centrally administered industry for:			
- total investments at wholesale prices	*	- 1.7	- 2.3
- export to socialist countries at wholesale prices	*	0.8	- 1.1
- export to nonsocialist countries at wholesale prices	*	0.1	0.3
- other sales for production consumption and operations at wholesale prices	*	1.4	*
Volume of industrial production	3.4	1.8	2.4
Average number of employees	0.6	0.6	0.5[2]
Labor productivity based on industrial production	2.8	1.3	2.1[2]
Construction:			
construction performed by internal labor resources	- 2.3	- 2.8	2.7
average number of employees	- 0.6	- 0.5	0.5
labor productivity based on basic construction work	- 1.7	- 2.3	2.1
housing units delivered by contracting enterprises	-28.2	-35.9	-19.1
Procurement:			
slaughter animals (including poultry)	1.8	3.3	- 1.4
milk	- 1.4	- 1.6	0.7
eggs	1.8	3.2	- 0.9
Retail turnover			
of the main trade systems	3.3	0.6	2.4[3]
Foreign trade[4]			
export to socialist countries	6.8	9.3	7.3
export to nonsocialist countries	- 4.3	6.2	9.1
import from socialist countries	0.2	9.5	12.4
import from nonsocialist countries	-16.7	- 2.3	6.7
Personal earnings[6]	1.6	2.4	3.6[5]
of which: wage incomes[6]	1.0	2.6	3.1[5]
actual cash expenditures[6]	4.8	1.2	3.3[5]

FOOTNOTES

1. Increases compared to actual 1980 results.

2. Increases compared to expected 1980 results.

3. All trade systems.

4. Data on actual results refer to actual results, the state plan (as opposed to actual results) does not include unplanned actions within the framework of cooperation, unplanned reexport trade, exchanges, and conditional trade transactions.

5. Including estimated interest on loans.

6. Data based on treasury plan of the SBCS [Czechoslovak State Bank].

9004
CSO: 2400/290

SITUATION OF INVESTMENTS IN PLAN PERIODS EXAMINED

Budapest PARTELET in Hungarian No 8, Aug 81 pp 17-22

[Article by Arpad Kovacs: "Plan and Investments"]

[Text] In the Fifth Five-Year Plan period the investments of the socialist organs exceeded the planned 870 billion forints by 5.6 percent. Over a 5 year average, 23.5 percent of the national income was devoted to investments. The ratio of savings came to 27 percent.

In the recently closed period, the plan counted on an equal distribution between state and enterprise investments. But because of the rapid growth of enterprise investments, this target was not achieved. The ratio of actual enterprise investments was 17 percent greater than planned, and came to 55 percent. The primary reason for this was that at the start of the plan period the expansion of convertible export commodity bases and the exhaustion of supplementary manpower resulted in the starting of many investments amounting to considerable sums of money. (Between 1976 and 1977, they approved the start of more than 2,000 investments through credits or supports). Thus more facilities were under the process of implementation at one time than we were capable of implementing in optimum time with available capacities.

In accordance with plan goals, the ratio of investments for expanding convertible export commodity bases increased within enterprise investments. As compared to the targeted 45 billion forints, they approved credits of 55 billion forints, and with which we created a capacity to expand nonruble account exports by about 90 billion forints. By marketing the products made with the help of these credits, we shall be able to realize an additional foreign exchange revenue of 1.2 billion dollars. Our experiences with the already concluded investments for export expansion have been favorable in respect to efficiency. Construction demand is considerably lower than average, implementation is more rapid. Machine imports which represent modern methods and technologies significantly exceeded the average. Investment costs exceeded the targeted goals by more than 5 percent.

Investment purchasing power increased more rapidly than planned. The credit and support system of developments could not fulfill its role of regulating purchasing power. However, regulator modification and the limiting measures taken in the last 2 years of the plan period improved the planned nature of the investments. Of the monetary resources for investment outlays, the ratio of eigen resources was the same as during the preceding plan period. The ratio of state budgetary sources declined by a small extent, and the ratio of credits increased to the same extent.

During the plan period, the specific costs of investments for both supplementary purposes and expansion increased significantly (by 52 percent). Of this, price level increases were lower (14 percent), which for the most part was the result of central price revisions. The increase in construction prices was caused by price changes in construction materials, tariffs and cost accounting norms. The effect of price increases for import machinery was significantly moderated by changes implemented in the exchange rate. Basically, the most important factor in the cost increases was the emphasis placed on quality improvement rather than on expansion of capital stocks.

In accordance with plan guidelines, no fundamental changes were made to the main economic structure. In the Fifth Five-Year Plan period--except in agriculture--investments in the basic producer branches increased more rapdily. Eighty percent of the investments served the development of material branches. There were differences between the investment growth rates of various economic branches and sub-branches, but there was no sub-branch in which development did not take place.

The new fixed assets placed into operation during the Fifth Five-Year Plan period, increased the gross value of 1975 operational fixed assets by 44 percent. Considering discarded equipment and other reductions, the new operations increased the value of the fixed asset inventory by 33 percent.

Total ongoing investments rose approximately 1.5 times during the plan period. Concentration on completing [investments] improved in the second half of the plan, but still the value of incomplete investment stock in the past year exceeded the sum paid out that year for investments. Therefore, we must deal more intensively hereafter with the factors that make for incomplete stocks with better preparation, and by reducing completion time for construction and mechanical work.

Continuation of Engineering-Technical Programs

The plan is counting on a 14 to 17 percent increase in the national income for the Sixth Five-Year Plan period. In order to improve the trade equilibrium situation of the economy and to coordinate production and consumption appropriately, domestic consumption of the national income may expand more moderately than the national income, or a total of 4 to 5 percent. About one-third of the increment in the national income must be devoted to improving the foreign trade balance. In domestic consumption, in harmony with the requirement to protect living standards and improve living conditions, the ratio of consumption will increase to between 81 and 83 percent, and the ratio of savings will decline to between 17 and 19 percent. Together with the amortization base, this ratio will also determine the possible size of the economy's investments.

According to the plan, we can devote 1,020 to 1,040 billion forints to investments in the socialist sector in 5 years which, considering price changes as well, will allow the approximate volume, of investment activity realized in the Fifth Five-Year Plan.

There will be no essential changes in the investments ratio of the direct producer branches and the nonproducer infrastructure. The producer investments will directly serve economic growth. The structure of investments in the direct producer branches will be significantly modified. The volume of investments in energetics will increase, while in the other producer branches somewhat more moderate investments may be realized than in the previous plan period. It is important that the sources for producer investments should actually serve product modernization, the modernization of technology and methods, and the state of organization to increase efficiency and to generate more national income per unit of investment. If the available sums are well used (for example, if the construction time declines, more machinery is acquired, the level of preparation, planning and implementation is improved, then the continuation of engineering-technical progress will be possible.

A moderation in the investment level, or its level maintenance for 5 years, does not mean an easing of the requirements related to their realization. In this period it will be necessary to moderate the ratio devoted to the establishment of new capacities and increase the ratio used to modernize and add existing capacities. The ratio of profitable investments which are relatively less capital intensive and can be realized within a short time will continue to rise. New investments in harmony with the plan goals can be started only if the conditions for concentrated realization can be created within a technically justified period of time. Fewer new investments will start, and this will make it possible to concentrate attention on works already in process. It is particularly important that an increasing ratio of investment means be used for development goals that will effectively improve the economic balance.

More limited possibilities require more deliberate decisions, such as also means their ranking according to efficiency. The principles for defining the state and enterprise spheres of decision will not essentially be changed. Outside of certain developments in energetics, only a very small number of basic material-industrial investments, and outstandingly important producer or infrastructural investments can be implemented in addition to those already started. Among the large producer investments preferences are given to outlays for expanding domestic energy and raw material sources. In this plan period such large important investments will begin, among others, as the coking plant at the Danube Iron Works, the Many mine operation, the Fenyofu bauxite mine, the reconstruction of the Szolnok Paper Factory, and the implementation of Mecsek coking coal production. The start of several large investments can be weighed only later as a function of the development of resources. Some of the large developments which cannot be planned as state investments may be implemented as enterprise investments. (Such, for example, is the construction of the cracking plant.)

Large, important investments will be completed in the 5-year plan period. These include: the Danube Iron Works converter steel plant, semiprocessing at the Light Metal Works, the Bito II bauxite mine, the Halimba III bauxite mine, and the Markushegy mining operation, as well as the Szekszard Meat Combine, the LKM [Lenin Metallurgical Works of Diosgyor] Combined Steel Works, the Budapest Trash Incinerator Plant, the large Sport Hall, and the reconstruction of Ferihegy airport.

Market initiative developments aimed at transforming the production structure and increased competibility will be taken up on the basis of enterprise decision and risk undertaking. The dynamic development of efficient, exportable production is a complex activity wherein important factors are technical development and commercial work in addition to investment and production organization tasks.

Among producer investments the ratio of enterprise decided investments will continue to grow. In their financing, a greater role will be given to credits which select development ideas on the basis of profitability and the criteria of [trade] equilibrium improvement. In the Sixth Five-Year Plan period, 60 percent of the credits that can be extended for enterprise investments will be devoted to investments aimed at expanding profitable exports or to a favorable decrease in imports. To implement investments whose profitability exceeds credit policy guideline levels, the enterprises may receive in state fund allowances on interest payment obligations if the enterprise or cooperative has tied its means to other productive developments. The ratios for the formation of enterprise self-development sources in the new price system correspond better than heretofore to the efficiency relations.

The scope and extent of state supports is narrowing. Their use is possible in those areas where the new price system can be used in a limited way, or it is unconditionally necessary to fulfill international obligations or to realize special economic goals. For example, such goals in the Sixth Five-Year Plan period may be: the development of economically operational goals; the production of energy-saving construction materials; the development of mass produced construction materials and devices; certain activities of the food industry; the development of agricultural construction, machine purchases and new planting sites; and the development of ship transportation. There is also possibility of supports for developments promoting the realization of branch goals. Such are efficient energy use; the manufacture of prefabricated products, semi-finished products, components and parts; the utilization of waste and secondary raw materials; public services; environmental protection; and area development.

An investment of 355 to 370 billion forints will serve industrial development. Only the most necessary energetics and basic material industry investments can be realized with state-decision development. In other areas of industry, particularly in the processing industry, the development of production, the modernization of technology, the transformation of the production structure, and the improvement of competibility can be implemented in the enterprise sphere of decision through the modernization and reconstruction of existing plants. In the development of the processing industry the role of state decision and financing is declining. State loans or fund allowances may be used for enterprise investments by observing efficiency conditions.

An investment of 128 to 135 billion forints will serve agricultural development. The realization of production tasks is served by better use of the stock of means in agriculture and the complex mechanization of production processes.

The aluminum industry, the petrochemical and the computer technology program is proceeding basically in accordance with determined goals and directions, but with consideration for the altered circumstances. We are starting pharmaceutical-herbicide-intermedier manufacture as well as the realization of the central development program for the production of electronic parts and components. A special program is being prepared to improve energy management, and developments which better utilize wastes and secondary raw materials as well as wood. Their realization will occur in the general decision and financing system.

Better Utilization of Means

The demand for fixed assets is growing in the present intensive phase of our economy. Investments and reconstructions are all more costly. The planned increase in national income compared to the preceding period will require a greater specific utilization of means. Fixed asset inventory with a production goal will increase more rapidly in 5 years by 24 to 27 percent whereas production will increase by 16 to 18 percent. As a consequence, capital efficiency in the plan period as a whole will continue to deteriorate, and this will also limit the increase in economic efficiency.

The stock of fixed assets which grew significantly between 1976 and 1980, and is still available today, and the latent reserves in the exploitation of existing means together with the increase in the stock of means between 1981 and 1985, varying in structure by branch and enterprise, provide a basis for increasing production and the necessary structural changes. In addition to investments, an important means for enterprise development is the better utilization of existing means, producer capacities, and the manufacture of good quality products that can be profitably sold on all markets. In many cases, the better utilization of fixed assets will provide the possibility for an economic increase efficiency in production without investments. But experience shows that in some instances the utilization of producer equipment and machinery lags behind possibilities even where the manufactured products are modern.

Our reserves in the utilization of capacities are bidirectional. On one hand, the better use of high-value and high-productivity machinery and equipment will make it necessary to operate more than one shift; and on the other hand, a more even loading and operation of the machinery within the existing work schedule is also a task. Implementing these tasks raises organizational requirements. Machine operation, material and parts supply, technical preparation, work and plant organization, and work distribution must be further improved. At the same time, the use of superfluous means and the discarding of obsolete, amortized fixed assets is also an important task. It is a requirement that enterprises should emphasize rational and economic solutions which are appropriate to the goal, and those organizational reserves through the utilization of which investments may be not only postponed but even entirely spared. The necessary capacities can be provided in ways other than by new investments.

Improving the efficiency of investment activity is possible by reducing the required implementation time. A condition of this, however, is an improvement in the balance between investment solvency earnings and the implementation capacities, the appropriate regulation of the number and volume of investments underway at one time, the creation of a higher technical and organizational level in preparation and implementation, and an increase in its efficiency. It is important both in the preparation and realization of investments that purpose and savings as well as responsibility should be realized in that the investments should be implemented by the planned deadline with the prescribed economy, in good quality, and within the cost provisions. Successful carrying out of the proliferating tasks requires that all the participants in the investments should improve their work and that the investors, the planners and implementers should intensify and coordinate their efforts better.

The development tasks called for in the Sixth Five-Year Plan are raising in many respects new and greater requirements on the enterprise collective where the investments are being realized. It is important that the investment activity should fit into the whole management of the enterprise. The goal is to coordinate financial sources and means, and for the enterprises to conduct a development policy using their own resources but adapted to the goals of the national economic plan. At the same time, they should take initiatives to see that they can obtain more credit sources beyond their own resources by reducing expenditures and increasing profitability. In view of the more moderate investment possibilities they should better consider for what kind of goals they want to devote their development monies. They should give priority to those investments which from the viewpoint of the production structure are more advantageous and can be more rapidly realized.

In planning their investments, the enterprises should investigate what kind of resources are necessary to supplement the existing producer means, machinery and equipment; how many investments are underway and from what sources their completion can be assured as rapidly as possible; what is the spin-off effect of developments that have already been realized; what means are necessary to operate the existing investments more efficiently; what magnitude of resources are available in the given period to start new investments; and whether the necessary material and technical conditions (construction, implementation, planning capacity, machine purchase possibilities) can be provided.

The enterprises should regard it as a basic requirement that the expansion of the fixed assets should be accompanied by increased operational efficiency and an improvement in means utilization. They should reckon realistically with the possibilities of establishing the import needs of investments. It is important that the enterprises be aware that given the present possibilities, a given investment decision is accompanied by greater risks than formerly, and in a given case it can have a significant negative effect both on enterprise and on economic results.

Today investments are still important in areas where stagnation or retrodevelopment might be justified. In these areas it is also a special task to consider the investment questions.

With the Help of the Party Organizations

Experiences thus far in the way the Sixth Five-Year Plan has been received indicate that in the interest of meeting the goals of party organizations and economic policy they regard it as necessary to realize even stricter requirements affecting investment activity. They support the solution of tasks with great activity and help in creation of the political conditions. It is indispensable that the district and work place party organizations and the communists who work there should interpret and carry out their tasks according to the 12th Congress resolution, and that they discover the contradictions which make their work more difficult.

It is the primary task of every party organization to help in the fulfillment of the plans and in increasing the efficiency of economic sork by means of political work. In addition to finding solutions to daily tasks, it is also a requirement on the party organizations that they should devote attention to questions concerning long-term development and as a part of this work they should control and assist in the formation of development and investment processes. The party organizations can play a great role in the more rational utilization of capacities and in a substantial improvement of work and plant organization. With better work organization and without an outlay of means, production efficiency can be increased by expanding cooperation relations, by pacing the rate of production, by better work preparation, or by smaller supplementary means outlay. The party organizations should support developments which make better management possible and are in accord with realities, and they should oppose an outlook and practice which does not adjust to conditions and which seeks for solutions in state supports.

The party organizations should help restrain that improper practice which is directed at starting investments as soon as possible without due care to adequate ground work. The efficiency and organization of the investment process is determined primarily by preparation or by the level of guidance. Therefore, the party organizations should devote greater attention to this. They should prepare themselves better than heretofore for attending to the political tasks related to making an investment operational, and controlling their implementation.

After formulating the goals in the planning process, the attention of the party organizations should be concentrated on seeing that the local conditions are assured for carrying out the tasks. Great attention must be devoted to discovering the causes of less economic production and the adjustment of investment and development activity into the system of enterprise management. Within the political guidance and control of economic work, they should concentrate their attention primarily on local tasks necessary for the improvement of the equilibrium, for the economic increase of export capacity, and for the development and investment activity serving these goals. For the consistent carrying out of tasks they should mobilize and help prepare the enterprises for accepting the greater requirements and for maintaining the necessary attitude.

The party organization should also devote particular attention to organizing the socialist work competition movement in order that the transformation of the production structure, the intensification of economic exports, the fulfillment of quality requirements, and the increased organization of investments are placed in the forefront of work competition. That is, in order to closely link these things to the altered requirements, they should help in the realization of investment goals conceived in the economic and enterprise plans.

6691
CSO: 2500/347

UDC: 669.3/4:341.232.3.075 CSM

CSEPEL WORKS ROLE IN CEMA NON-FERROUS METALLURGY NOTED

Budapest KOHASZAT in Hungarian Vol 114 No 7, Jul 81 pp 318-320

[Article by Tamas Grof, technical director, and Dr Bela Albert, department head, Non-Ferrous Metallurgical Plant, Csepel Works]

[Text] The Non-Ferrous Metallurgical Plant of Csepel Works participates in the cooperation among CEMA countries in many ways as the representative of Hungarian heavy non-ferrous metallurgy. The cooperation is realized in the field of production by means of specialization of manufacture and utilization of manufacturing capacity; cooperative manufacture is developed; and there is cooperation in scientific and technical areas within the scientific and engineering councils, extert brigades, and aspirant training. There is also exchange of information.

We have recently commemorated the 30th anniversary of the foundation of the Council of Economic Mutual Assistance. This milestone is the occasion for reviewing and analyzing the ties that bind the Non-Ferrous Metallurgical Plant of Csepel Works to the socialist economic community manifesting itself by this organization.

As we all know, international division of labor developing within the framework of socialist integration -- as a result of political cooperation -- creates a closer relationship among the participating countries than does capitalist integration, and provides broader and closer relationships among the member countries. As the Declaration of Foundation also points out, CEMA combines the resources of the member countries, coordinates their activities, facilitates systematic and accelerated development, and raises the standard of living in the member countries at an above-average rate.

It is precisely this latter goal, the primary political goal, which represents the basic condition of the international division of labor among the socialist countries and ensures that the aimed-for mutual advantages are realized.

The Non-Ferrous Metallurgical Plant of Csepel Works participates in all cooperative endeavors of CEMA, ranging from scientific-technical relationships to the exchange of goods. This intensified activity is not only in the best interests of the enterprise. Much more so, it is the manifestation of the fact that the Non-Ferrous Metallurgical Plant of Csepel Works, the sole heavy non-ferrous metallurgical facility in Hungary, represents national interests -- or, in other words, is responsible for these interests. Let us just think of the many needs of electrical technology, electronics, and instrument manufacture in terms of quantity, quality, and the multitude of products. It would be impossible to meet all these needs -- which show an increasing trend in all respects -- at the required technological level without making full use of the production capabilities of all member countries, each being based on the individual country's traditions and production culture, and providing for a means to ensure the exchange of products. Further along the line of this reasoning, we need technical development for tomorrow's products, and for this we need the exchange of experiences and the advantages arising from scientific and technical cooperation.

The Non-Ferrous Metallurgical Plant of Csepel Works, aware of its role in the national economy, and conscious of its responsibility, joined this cooperative effort in all its ramifications, and entered the chain of socialist integration.

The most important part of the work takes place within the Permanent Committee on Non-Ferrous Metallurgy, of which the chairman is a Hungarian, where the enterprise is always represented. The primary activity of the committee is the coordination of the five-year plans for non-ferrous metallurgy; the establishment of the technical guidelines governing the development of products and semi-finished products in the area of non-ferrous metallurgy; ensuring the utilization of free manufacturing capacities in the area of non-ferrous metallurgy; cooperation in the field of product interchange; handling of the problems related to the ore-exploration, ore processing, metal utilization, and metal replacement; and specialization of the manufacture of non-ferrous semi-finished products. The work of the committee plays a decisive role in the operations of the enterprise.

The so-called "Metal Processing" working committee, established to promote the utilization of free manufacturing capacities, contributed materially to the fullest and most economical utilization of the tube- and bar-manufacturing capacities, which were established in part with Soviet-made equipment.

The enterprise is also involved in another committee, the so-called "Rare Metals" working committee, to ensure the manufacture of its fine-metallurgical products in economical quantities. We submitted bids during last year for nickel wire and strip, manganese-nickel wire, Permalloy and Fe-Ni strip, refinable copper-chromium-zirconium and copper-beryllium bar, and brass condenser pipe to Bulgaria, Poland, Czechoslovakia, and the DDR, in the amount of approximately 10-20 tons per year.

In the course of their work, the working committees concluded agreements for the specialization of production. Representatives of our enterprise took part in the formulation of the specialization agreement and its discussion. Product-interchange activities resulting from product specialization developed primarily with the Soviet partner. Within the framework of this cooperation, we supply condenser pipe and brass wire to the Soviet partner, and receive hot-rolled brass and copper strip in exchange. In addition, we purchase Soviet-made hot-rolled beryllium-bronze strip, which we then convert into thin strip by a technology representing high-level engineering and requiring high precision. Almost all the product is then returned to the USSR. We are exporting copper-chromium-zirconium bar to the USSR since a few years, obtaining most of the starting material (cathode-grade copper and copper-chromium prealloy) from the Soviet partner. Receipt of our non-ferrous metal requirements within the framework of socialist integration is illustrated by the foregoing and also by the fact that the USSR also supplies us with cathode-grade nickel and zinc ingot. Almost 3700 tons of our products involve some product exchange with the USSR.

Our relationships with the other socialist countries are similar in character. Our enterprise supplies iron-nickel strip to the DDR in exchange for semi-finished products for eyeglass-frame manufacture and Alpaca wire. In exchange for tube and bar products, Romanian and Czechoslovak enterprises obtain sheet-metal products from us. Within the framework of our close cooperation with the Polish partner, crankcases made of aluminum alloy for road-vehicle manufacture represents an important item.

Our experiences with production cooperations of this kind were favorable, and we desire to expand them. For example, in exchange for exported brass bar and pipe, we seek a source of import of prefinished copper pipe made by pilgering. This would enable us to utilize our copper-pipe manufacturing capacity more fully and more economically, and would permit its expansion.

It is a known fact that many rare-earth metal additives, such as zirconium, yttrium, indium, and cesium, provide favorable technological and application characteristics to precision-metallurgical products. Hungary uses no more than 100 kg of these rare metals and certain high-purity metals per year. Concentrated and economical production of these metals, and the supplying of the individual member countries is made possible by specialization of manufacture and centralized handling of the requirements. This is also part of socialist integration.

Production cooperation means not only exchange of products but also the meeting of the occasional needs of the member countries for special products, often required in small quantities only. As an example of this kind of cooperation we mention the fact that Hungary has prepared the manufacture and proceeded with actual production of matte-finished nickel strip, needed by the USSR.

We have already mentioned that the CEMA countries conduct more and more technical and scientific cooperation, and develop the appropriate forms for such cooperation. The Non-Ferrous Metallurgical Plant of Csepel Works operates in this area both through the Non-Ferrous Metallurgical Permanent Committee and through bilateral agreements.

Our participation in the exchange of technological and scientific data manifests itself in the interchange of research results and the participation in expert brigades set up for this purpose.

It was through exchange of information that we learned the results of studies in the DDR concerning the physical and technological characteristics of oxygen-free copper made in vacuum furnaces or by means of continuous casting. This subject is closely related to our degasification studies made with the aid of mass spectrometry. Our Polish partners taught us how to carry out precise analyses of gaseous impurities.

Soviet experts gave us the vacuum-melting technology for nickel, copper, and their alloys in induction, arc, and electron-beam furnaces.

Material supplied by us within the framework of information exchange concerned primarily the melting in vacuum-induction and electron-beam furnaces. Studies of desoxidation in vacuum-induction furnaces; crucible reactions taking place in nickel melting; technological results in vacuum-melting of copper, nickel, and their alloys; and effects of melting speed on the gas and contaminant content of high-purity nickel made in vacuum and electron-beam furnaces are the most noteworthy items we have provided.

The work of our brigade set up for studying the manufacture of pipe and bar of non-ferrous metals is also worthy of mention. The delegations of CEMA countries learned in our enterprise primarily the modern manufacture of brass condenser pipe in modern, three-strand Kieserling equipment, and were also advised about the annealing and heat treatment of these products in Ebner furnaces with roller floor. In exchange, our experts were given the opportunity to become acquainted with the manufacture of condenser pipe (mostly made of copper-nickel alloy) in highly efficient pilgering equipment, carried out at the Non-Ferrous Metallurgical Factory in Artemovsk, USSR.

Among our direct bilateral activities, we mention our participation in the project led by the Soviet-Hungarian Intergovernmental Scientific and Technological Cooperation Committee, dealing with the manufacturing technology of high-quality steels, transformer steels, and dynamo steels. We succeeded in developing an industrial method for 0.05 to 0.35 mm thick, cubic-textured strip production.

Soviet and Hungarian strip were compared with the aim of developing current technologies in the course of the dynamo-strip studies.

The cooperation with the Non-Ferrous Metallurgical Ministry of the USSR deals, among others, with the systematic crystallization of non-ferrous metals. The aim of these studies is the selection of graphite-crystallizing basic materials for increased lifetime of the expensive crystallizer. These projects make it possible that we obtain the basic material for crystallizing graphite from socialist sources.

Our scientific and technical relationships with the DDR are manyfold and have a long past history. The major part of our cooperation with the Mansfeld Combine, and its various plants and institutions, is in the area of processing of copper scrap, copper refining, copper electrolysis, and some aspects of drawing and electrolysis of copper wire, and rolling of non-ferrous metals. In addition and related to the above, we exchange specialist brigades to the various plants for various periods of time to enable them to broaden their knowledge and to learn about technical operations elsewhere.

We believe that our relationships with the Aue plant of the Albert Funk Combine of Freiberg are very important. The two plants have similar product line, [illegible] that there is even more scope for joint experiments and exchange of technological experiences.

Insofar as the fine-metallurgical products are concerned, we first mention soft-magnetic strip. In this subject area a complex test series was started with the aim of the elucidation of melting and casting technology, magnitude of forming, and the relationship between strip thickness and magnetic parameters. The jointly obtained results were utilized in part for vacuum-metallurgical development in our enterprise. Documentation was also exchanged. In exchange for the manufacturing technology of soft-magnetic strip Type P 50 000, we received the documentation for the magnetic strip Type Muniperm 100.

Bar and strip products capable of being manufactured by means of systematic crystallization and -- related to this -- joint studies on the instrumental examination of surface and internal defects of strip products represented a new subject area.

In the future, we hope that solutions to the question of modern energy transmission with minimum loss will be found by using superconducting cables. A team studies niobium-titanium and vanadium-gallium superconductors; in this study the team is joined by Soviet, East-German, and Hungarian institutions. In addition to other domestic institutions, the Non-Ferrous Metallurgical Plant of Csepel Works also participates (the latter through the Intergovernmental Coordinating Committee on Rare Metals).

It can be seen from the foregoing that our enterprise is committed to socialist integration: It is actively engaged in various scientific and technical cooperative projects. We plan additional joint scientific projects, such as the examination of the domain structure of magnetic materials used in industry (through the Academy of Sciences of the USSR), textural studies (through the Institute of Metal Physics in Cracow of the Academy of Sciences of Poland), and matters related to the cermet-strip manufacturing technology (through CEMA institutions still to be included).

The CEMA agreement provides for the period of the Sixth Five-Year Plan further developments in the graphite crystallizer. We are also interested in subjects related to new corrosion-resistant condenser pipe, specifically micro-alloyed materials and corrosion testing technology.

The fact that our enterprise has entered licence marketing and procurement indicates that we are desirous of expanding our technological scope. It is our intention to market the intellectual capability of our experts, codified in patents issued to the Non-Ferrous Metallurgical Plant of Csepel Works. Among these patents the following are worthy of special mention: Manufacturing technology of copper and copper-alloy strip products capable of being intensively cold-formed and having isotropic mechanical properties, and a modern method for processing scrap to obtain the starting material for high-purity copper. Furthermore, our enterprise cooperates closely with other countries, primarily the USSR and the DDR, on the subject of licence procurement. There are tests underway of novel, Soviet-developed spring strip based on copper.

There is also cooperation involving the opportunity for our experts to study in the USSR as aspirants. In our opinion it is an important fact that our Soviet partners provide us with special articles and books as needed. On the other hand, our enterprise has the opportunity to publicize its scientific and technical achievements and products in the form of lectures at Soviet special exhibitions and fairs, permitting us to avail ourselves of the potential of these events.

Mention should also be made of those aspects of CEMA scientific and technical cooperation which cannot be properly reflected in protocols and final communiques. The joint studies and information exchanges, primarily during mutual visits, permitted personal friendships to develop among the participating experts, and permitted existing friendships to deepen. Such friendships do not involve the competitive struggle, the acquisition of development results at any cost, or similar endeavors: after all, they exist on the basis of socialist integration. Instead, the goal is to facilitate interchange of knowledge and to transfer experiences which may at first glance appear to be minor but which are often of decisive importance in actual practice.

We wanted to illustrate the role of the Non-Ferrous Metallurgical Plant of Csepel Works in the CEMA cooperative effort in the area of non-ferrous metallurgy. Of course, we could not cover the subject fully; for example we said nothing about the development of joint standards. The experience of our enterprise in the recent past confirmed that there is good justification of socialist integration, and that it uncovers still unexploited resources within the member countries' economies, which can be channeled to existing problems and tasks. Our enterprise, supporting Hungary's policy of making full use of these potentials, will continue these efforts, as outlined in the Complex Program.

2542
CSO: 2500/363

HUNGARY

UDC: 669./8:341.232.3.075

CEMA COOPERATION FOR EXPLOITATION OF NON-FERROUS METALLURGY

Budapest KOHASZAT in Hungarian Vol 114 No 7, Jul 81 pp 320-321

[Article by Dr Karoly Budai, head of the Hungarian section of the CEMA Permanent Committee on Non-Ferrous Metallurgy]

[Text] The author describes the work of the CEMA Permanent Committee on Non-Ferrous Metallurgy in the areas of coordination and scheduling of the excess capacities of the non-ferrous metallurgical facilities of the member countries for mutual advantage.

The rate, character, and extent of the production of metallurgical plants does not usually conform precisely to the needs of the users of the products. Whenever new plants are started up, there is a sudden increase in productive capacity. Yet, the needs of the users of the products usually grow at a steady rate in the order of magnitude of a few percents per year. As a result of this, there is usually shortage before the startup of a new plant and an overcapacity after the startup. This means that there is unutilized capacity for a time. It also means that the product concerned has to be imported before the new plant is started up. Once the new capacity is available, there will be unused manufacturing capacity or an export potential (up to the extent of the difference between unutilized capacity and current need).

The fact that several countries usually carry out similar development projects simultaneously causes this effect to become even larger since the free capacities are added up.

The CEMA Permanent Committee on Non-Ferrous Metallurgy has analyzed these factors and created a special team for dealing with them. The team was charged with the task of coordinating and scheduling the deficiencies and excesses of non-ferrous metallurgical capacities for mutual advantage.

All CEMA countries -- Bulgaria, Hungary, the DDR, Poland, the USSR, Czechoslovakia, Romania, and Yugoslavia -- are represented by delegates.

The procedure of the team is summarized as follows:

- The delegations of the individual countries meet twice each year. At the November meeting they discuss the cooperation possibilities and conditions during the first half of the next year, and at the May meeting they discuss these for the second half of the year.

- Approximately one month before a meeting, the delegates of the individual countries inform each other in writing about capacity shortages and excesses in their respective countries up to the meeting's scheduled time. This enables the delegations to organize themselves for the discussions and for the conclusion of any agreements that may ensue.

- The production enterprises, foreign-trade enterprises, and -- if necessary -- the governmental organs in charge participate in the individual national delegations.

- Unlike other similar organizations, this team has no permanent executive body (such as Intermetall and Interchim.).

The lack of the utilization of metallurgical capacities may manifest itself in a given year merely in terms of product assortment; however, its effects might be felt over a period of several years. In the event that there is a possibility of cooperation over a period of several years, this might become the basis for longer-range joint action or may result in the establishment of production specialization.

Making use of this possibility, the team developed a production specialization agreement to facilitate the conclusion of long-term international agreements in the field of semifinished non-ferrous metallurgical products. A specialization agreement of this kind was first signed during the 1975 to 1980 period. Preparation of an agreement to cover the next plan period (between 1981 and 1985) is underway.

The mutual deliveries specified in this agreement ensure that producers and customers have a dependable source of supply for a period of several years, so that they are adequately provided with work and materials. At the same time, it becomes possible to develop the production capacity for the given item in a systematic manner and in some instances to meet the needs of several countries by creating more economical production conditions.

According to the practice that has developed, the customer party provides the raw material (non-ferrous metal) to the manufacturer; thus, the arrangement resembles contract work.

The team was set up in 1965, and during the last 15 years approximately two million tons of non-ferrous metals were processed according to the scheme. Calculations indicate that approximately 600 million dollars was saved (in terms of manufacturing costs; not counting the value of the materials processed), in freely convertible currency.

Hungarian deliveries within the total deliveries are tabulated below.

Table 1
Metal shipments of CEMA countries in the last 15 years

Export, import	1979		1965-1979	
	1000 tons	%	1000 tons	%
Total export	214	100	2020	100
Hungarian, included in the above	18	8.4	159	7.9
Total import	214	100	2020	100
Hungarian, included in the above	69	32.2	485	24.0

It can be seen from the table that we made good use of the opportunity of eliminating more and more the consequences of the shortage of our manufacturing capacities by utilizing manufacturing capabilities existing in CEMA countries. In the process we also saved investment costs, since we eliminated the need for building domestic facilities for some products which we obtained via this cooperation and specialization.

On the basis of detailed data it is evident that we were the third largest exporting country and the largest importing country.

To sum up, the team's work was useful for Hungary and the other CEMA countries since

- the non-ferrous metallurgical plants could operate more economically and the production facilities could be utilized more efficiently;

- the expenditure of freely convertible currency could be reduced since less non-ferrous metal had to be imported;

- metallurgical developments could be better coordinated;

- personal relations were established as a result of the operation of the team, contributing to the continued success of the project.

2542
CSO: 2500/363

INFLATION IN POLISH ECONOMY DURING 1981-1983 ANALYZED

Warsaw ZYCIE GOSPODARCZE in Polish 9 Aug 81 pp 1, 9

[Article by Wiktor Herer and Wladyslaw Sadowki: "Phenomenon and Mechanisms": passages in slantlines printed in boldface]

[Text] Examining the shelves of our food stores one gets the impression of them having been battered by a passing hurricane that has swept away all the goods. Never in our postwar history have the shops looked that way, not even in the worst time when physical consumption of particular foodstuffs was several times lower than it is now. This total decay of the foodstuffs market is not proportionate to the drop in the amount of supplied goods. It is taking place even with no cuts in supplies or with relatively slight cuts.

In the last few months, the plague has increasingly spread to the manufactured goods market where acute shortages are beginning to extend to yet new commodity groups. In this market, a severe shortage of goods can be attributed to the slump in production only to a certain degree. Where then, should we look for the main cause of the consumer market falling apart right before our eyes?

At the root of this threatening phenomenon is above all a rapid spurt in the growth of inflationary curve. It is combined with the irregularity in the consumer goods flow to the market resulting mainly from arythmical imports of raw materials supply. This irregularity in the final count deepens and accelerates the process of destruction of the entire market by causing panic buying and hoarding financed by the cash fund held in expectation of goods.

Counterbalancing the growth of the inflationary curve becomes an absolute necessity. However, a clear and as precise as possible understanding of the nature of this phenomenon and a quantification of the economic ratios contributing to it are the indispensable premise for any course of action to that end. This is what the present article is devoted to.

Formula of the Inflationary Curve and Its Applications In the Environment of the 1981-1983 Period

Let us start with a definition of the phenomenon in question. By the inflationary curve we mean the amount of money released as remuneration for labor and various other forms of monetary income which is not covered by respective goods and services and at the same time is not associated with regular voluntary savings of permanent character or the creation of necessary emergency fund at the disposal of the population. Thus, the inflationary curve includes monetary funds of the population less voluntary permanent savings and necessary emergency funds.

The mechanism of formation and development of the defined inflation curve is described on the following simplified assumptions: - the physical supply of goods and services and their prices are not subject to change over the entire period under consideration;

- the overall nominal income is stable as well, that is to say unchanged by shifts in the labor force or rate of remuneration.

These assumptions merit more remarks. Having introduced them, we provide an opportunity to examine the mechanism of formation of the inflationary curse under the most simple conditions, revealing to the fullest the essence of its functioning. This mechanism works with stable supply of goods and stable income just as well.*

But that is not the end yet. The drawbacks of these analytically convenient assumptions are essentially very few, however, they allow, in our present environment, a comparison with what we can term /"the critical mass"/ of the inflationary phenomenon with which we actually have to deal in our economic practice.

Basing on the above-mentioned assumptions, the inflationary curve can be described by the following simple equation:

$$I = at + b$$

where

I - fund of money at the disposal of the population, kept in expectation of goods and not regarded as permanent savings,

t - time (independent variable),

a - index, defining the flow increment in the inflationary curve, constant in all the years of the analyzed period, according to the accepted assumptions,

b - constant describing the inflationary curve at the beginning of the analyzed period (at $t + 0$).

The difference between the magnitude of the flow of the populations' monetary income allocated for market spending and the amount of annual flow of market goods supply generates growth of the I curve. This difference (the at member in Formula 1, at $a = 0$) creates the /inflationary gap/, or the flow of money, allocated for purchases, which, not having found market coverage, augments the inflationary curve and accounts for its increments over time (annually, quarterly, monthly, etc.). Due to the permanent increase of /the curve/ by the magnitude of the gap, this curve at any given moment* represents the magnitude of the gap accumulated over the period under consideration, plus the initial magnitude of the curve at the beginning of the period (constant b in equation 1).

---

* The above goal could also be achieved on a perhaps more realistic assumption, according to which absolute increments of nominal value or goods and services delivered to the market in particular years equal absolute increments of total nominal income of the population.

On the basis of the above, the inflationary curve at the end of any given period could be seen as a combination of two elements:

- initial inflationary fund (constant b in equation 1),

- /flow/ increasing the initial fund, or the increments of the fund over time (coefficient a in equation 1 times t, the time elapsed since the beginning of the period under construction).

Of crucial importance is the destructive impact of the inflationary curve on the market. It can be measured by the I : T ratio. where T is annual flow of goods to the market, constant over the entire period, according to the accepted assumptions. Now let us try to apply this simple equation to our reality.

On January 1, 1981 the inflationary curve stood at 0.2 trillion zlotys according to the most conservative estimates. Decisions on increases in wages, social security benefits and procurement prices passed in the second half of 1980 boosted the nominal income of the population in 1980 to the level of 1.9 trillion zlotys. After the subtraction of 50 billion zlotys due to the annual increase in savings resulting from the standard savings trend, the total comes to 1.85 trillion zlotys a year. The flow of market supplies in 1980 totaled 1.4 trillion zlotys. With the results of price increases on alcohol in 1981 in the picture, it comes to 1.45 trillion zlotys a year.

If, in accordance with the assumptions, the flow of income as well as the supply of goods and services, are to remain unchanged, it can be asserted that the inflationary gap in 1981 will be in the vicinity of 0.4 trillion zlotys, that same statistic representing at the same time the annual increment of the inflationary curve.

Plugging the above estimates into equation 1 leads to the following conclusions:

- in the second half of the 1970s, a continuous growth of the inflationary curve occurred, leading to the already mentioned level of 0.2 trillion zlotys at the beginning of 1981. (This is the amount of the initial inflationary fund, or constant b, in equation 1).* At the time, the magnitude was already considered too large. It was estimated to be one of the main causes for the lack of overall market equilibrium and partial equilibriums.

- in the year 1981, a /rapid acceleration/ in the growth of the inflationary curve is occurring. Its annual increment in 1981 will reach about 0.4 trillion zlotys (this is the magnitude of at in equation 1, at t = 1). Accordingly, the curve at this yearend will reach 0.6 trillion zlotys, or, in other words, will /increase threefold/ over the year 1981.

---

* It is apparent that a change in the beginning of the analyzed period, for example from January 1, 1981 to July 1, 1981 would cause the numerical value of constant be to change.

- if, according to our assumptions, nominal income of the population is not to grow in 1982 and 1983, and the amount of market deliveries of goods and services is to remain steady at the level of 1980 (with an allowance for increased prices of alcohol), then, in the absence of a price-income reform the inflationary curve will continue to increase in a linear fashion as equation 1 suggests, at an annual rate of 400 billion zlotys. Under these conditions the curve at the end of the following years will assume the following shape:

	1980	1981	1982	1983
inflationary curve at yearend - I, trillion zlotys	0.2	0.6	1.0	1.4
value of market deliveries of goods-T	1.45	1.45	1.45	1.45
ratio of the inflationary curve to the annual value of market delivery at yearends, percentages - I : T	14	41	70	97

This rapid growth in itself would not be a threatening phenomenon if it were not for the disastrously high and at the same time rapidly increasing ratio of the curve to the market deliveries of goods (I : T) coupled with this high rate of growth attained from the beginning of 1981.

The level and development of this ratio is the foremost testimoney to the gravity of our situation. On top of that, it should be mentioned that all the above statistics have been calculated on simplified assumptions eliminating the factors further aggravating our market situation. This is the meaning of the simplified assumptions of no further growth in nominal income of the population past April 1981, and of market deliveries of goods and services stabilizing at the level of 1980. The results obtained so far must be interpreted as saying that /even if nothing happens that might aggravate the market situation in the way of increasing the inflationary gap generated in the first quarter of 1981, the inflationary curve will grow at a dizzying rate, causing increasing destruction of the market and the monetary system/.

Predicted Consequences of the Inflationary Curve Growth

While examining this threatening phenomenon, one should bear in mind that so far we have been witnesses to only the initial stage of accelerated (in comparison to the pre-1981 period) accumulation of the inflationary curve. Under the circumstances, every one of us should ask himself a question: how can our market fare at yearsend 1981 and in the following months, when a fast-growing and powerful flow of additional money will be superimposed over the decreasing supply of consumer goods and the already totally collapsed foodstuffs market? How will the exchange of goods and money binding the individual peasant agriculture to the economy work out? Especially worrisome should be the threat to the steadiness of bread supply to the urban population. Unless the raise in procurement prices of grain is accompanied by a substantial raise in the price of bread and other baked goods reimbursed by adequate wage increases, it is bound to cause further increase in the use of bread and cereals for animal fodder. This, in its turn, can bring about an absolutely unique phenomenon of artificial hunger - a paradox for the country boasting one of the highest per capita bread production rates.*

The Inflationary Curve and Classical Inflation

The formation and growth of the described inflationary curve definitively sets our inflation apart from inflation processes that have occurred throughout domestic and foreign history. The essence of these processes can be found in the /simultaneous/ growth of nominal income of the population and prices preventing the formation of a gap between the flow of monetary income and market supply. Such a mode of simultaneous increases in prices and monetary income, if rapid, can certainly be very painful for broad strata of the population (examples of such relations can be found in Great Britain and Yugoslavia). This mode does not, however, obliterate the market nor does it undermine the foundation of monetary turnover. At the same time, consequences of the inflationary process unfolding in Poland before our eyes are different indeed. Ours is the kind of inflation that /destroys and kills/ the market. This is its /peculiar feature/ setting it apart from other inflationary processes observed throughout economic history. Thus, we are witnesses of a unique and at the same time menacing phenomenon, which has never occurred on that scale in either our or any other country. One can consider that the processes described by us are far enough removed from the classical "inflationary spiral" based on simultaneous growth of prices and wages for the very term "inflation" possibly being inappropriate as a definition of what is happening in our country.

Opportunities for Limiting the Curve Without Price Increases

It is evident that all of us would like to find means of decreasing the curve that are not fraught with social conflicts. From this point of view, an eradication or at least a significant limitation of the curve can be best achieved by respective increases in production. But what kind of production should it be? Agriculture should be altogether exempted from anti-inflation measure. With the current ratio of procurement and retail prices of food, any increase in food production, valuable as it is /from the point of view of meeting the country's nutritional needs/

---

* Bread as opposed to meat is a peculiar commodity. It provides for the most basic needs of the human organism which should be met by the entire population of the country. However, bread consumption is highly differentiated not only in relation to the kind of job, but also to the conditions of life and especially to different consumer habits and so on. Hence, the introduction of bread rations established at the average level under the conditions of sharply differentiated consumption would doom a segment of the population to something we might call the brink of physical hunger. This will be the case even if the differences in consumption are partially taken into account, especially the ones resulting from the strenuousness of one's job since only these differences are easily discernible. Increasing the rations as far as the existing limited options would allow would definitely not prevent "the artificial hunger" of some people, but would unmistakably encourage a considerable waste of bread by others. This waste would also accompany the phenomenon of artificial hunger" with the rations set at the average level anyway.

precipitates a new flow of additional money with no market coverage. At the same time, in industry even a return to the 1980 production level (the one we have assumed as the base for our estimates of the inflationary curve), or getting out of the deep "low" into which we are still plunging, is too difficult a task to be considered achieveable this year. And let us after all, look into the amounts that are to be reckoned with here. Even if we were to secure in, for instance, 1983 a 5 percent increment in market supplies over the 1980 level under some very favorable circumstances, this would only provide about 70 billion zlotys worth of additional market supplies. This additional increment of market supplies would then have to offset the inflationary curve, which, should the events be allowed to take their course, would reach an immense quota of 1.4 trillion zlotys, as was estimated above. /Being fully aware that influencing the supply is the most important task of any anti-crisis program we should nonetheless assert that now even a relatively substantial increase in supply cannot play an appreciable role as a factor counteracting the disastrously high and rapidly growing inflationary curve/.

Now let us switch to the demand side of the balance. One can enumerate dozens of publications offering different, generally feasible proposals of how to drain the inflationary curve by reducing demand in the ways that are less socially sensitive. Let us mention some of them:

- encouraging the growth of savings,

- taxing high incomes,

- special-purpose savings earmarked for sought-after goods,

- national loan.

While these instruments are being enumerated, they seem to be very attractive solutions. It looks less so when one starts figuring out their market impact, pencil in hand. Quantification shows that not only the impact of each of the measures on its own but even their combined impact is very small compared to the scale of the inflationary curve. All the measures can tie up not more than 40-60 billion zlotys net. From the drain effect point of view, only the net result counts, i.e., the one obtained taking into account that, for instance, special-purpose savings as well as the taxation of high incomes reduce permanent savings. For sure, these instruments would have been very effective had they been implemented 2 years ago. The present scale of the skyrocketting inflation curve is too large for the combined drain effect of all these socially safe instruments of demand reduction to be of appreciable economic consequence. Taxing high incomes should be seen primarily in the context of political impact (honoring the principles of social equity). The drain effect of all these measures is, however, of no appreciable importance.

Those advocating the eradication of the inflation curve by creating unemployment are totally wrong. Let us assume for a moment that a proposition has been accepted to reduce empllyment in the socialist sector by 5 percent, or 600,000 persons thus creating a respectively strong unemployed labor force. In this way, the wage fund can be reduced by definitely no more than 50 billion zlotys (wages of those laid-off would be lower than the average). Now let us compare - even without the fundamental societal imperatives in the picture - the social upheaval which could result from the creation of a 600,000-strong unemployed labor force to the relatively small effect of this operation.

By the same token, no drain affect should be expected from reductions in investment. Reductions of the wage fund in the capital investment sector should because of social concerns be accompanied by channeling of respective moneys into retraining the labor force, assistance in starting up farmsteads and workshops, creating new jobs in the service sector and into social programs (earlier retirement). These measures, similarly to the ones aimed at changing the structure of production in the investment sector, can increase the volume of market deliveries only after 2 or 3 years. What conclusion does this lead to? In the present pathetic situation only such measures count in the attainment of market equilibrium which can immediately generate a large effect. In the case of investment, such effects due to social, economic and technical (lead time) considerations can be neither too large nor immediate.

Let Us Not Hide the Bitter Truth

Telling truth to the society is a professional responsibility of the economist. It is so just as well when the truth is unpleasant - and in summation we must conclude that the eradication of the inflationary curve or even a considerable reduction in its further growth cannot be carried out in a way other than a /substantial increase in retail prices/ of all consumer items in various degrees with only a /partial reimbursement/ to the society by respective growth of monetary income.

We are well aware of the socio-political barriers into which any drain-type price reform is bound to run. It is, however, evident to us that by carrying it out a social explosion cannot be risked. A price reform can only be carried out if there is an assurance gained through prior negotiations of it not disrupting social peace.

Each drain-type price reform must strike a compromise between what is the most rational from an economic standpoint and what is possible given the socio-political limitations any economic policy must respect. The task of this paper is, however, to present only the economic end of a price adjustment. This paper can be of use only if compared with the socio-political reality of our country. The lack of extensive elements of such a comparison does not allow us to consider the present paper a realistic program of overcoming the crisis.

9761
CSO: 2600/302

ROLE OF SCIENTIFIC RESEARCH IN PRODUCTION PROCESS VIEWED

Bucharest REVISTA ECONOMICA in Romanian No 34,21 Aug 81 pp 9-10

[Article by Mihail Florescu, minister secretary of state of the National Council for Science and Technology: "Science as an Essential Factor for Intensifying Economic-Social Progress"]

[Text] The Romanian Communist Party Program of creating a multilaterally developed socialist society and advancing Romania towards communism has as its supreme goal the continued improvement of the material and spiritual well-being of all the people and the growth of the degree of civilization of our nation. All efforts for the development and modernization of national economic structures and for the accelerated growth of the social product and national income are subordinate to this goal.

In the drawing up of the modern concept of creating a multilaterally developed socialist society, a decisive role was played by the secretary general of the Romanian Communist Party, comrade Nicolae Ceausescu. At the time of the Ninth Party Congress the role of science and the technical-scientific revolution in the building of socialism and in human knowledge and the concepts of materialist-dialectical and historical philosophy was permanently stressed. This is how comrade Nicolae Ceausescu referred to this thesis in 1970 at the International Physics Congress in Bucharest: "It has always been known that science has played a giant role in society, in the efforts to more profoundly understand the secrets of the universe and to master the laws of nature and in the acceleration of the material and spiritual progress of mankind. The role of science has become even greater today, during the era of a rapid contemporary technical-scientific revolution when, on the basis of the discoveries made by scholars and researchers, man has boldly ventured into space and has come to ever more thoroughly conquer the secrets of the atom. In our times, science has directly become an important force of production. Incorporating its results into practical work has brought about a giant growth in society's material wealth and an unprecedented growth in the people's potential for creative work. Through its decisive influence on social affairs, science is ever more affirmed as an immense boon to civilization."[1]

---

[1] Nicolae Ceausescu, welcoming speech at the 16th International Physics Congress, "Ampere," in Bucharest, 1 September 1970, "Romania on the Path of Creating a Multilaterally Developed Socialist Society," Vol 5, pp 75-79.

Under favorable social and political, national and world conditions, science is capable of contributing to the solution of the great problems of mankind today, to the use of inexhaustible and renewable energy natural resources, to the better use of natural resources and raw materials, to the elimination of the terrible food crisis which is causing hunger for three-fourths of mankind and to an equitable quality of life for all mankind, for all peoples cooresponding to a high level of civilization.

A Force of Production With Remarkable Effects

The transformation of science into a direct force of production and the expression of this process in its full scope are taking place through the direct incorporation of science in the production process, through the creation and use of new means of work and tools of work having superior properties and through the improvement of all the means of production, the quality of the workforce and the change of the content and the growth of efficiency of the work process. In order to be expressed as a force of production, any science must directly serve material production and social-economic practice. This role, first of all, is played by the natural sciences: physics, chemistry, biology. The exact sciences, mathematics and cybernetics, are also playing to an ever greater degree the role of direct forces of production, offering knowledge of a fundamental or applied nature. Second, the technical sciences, as long as their laws, principles, models and methods can be applied in practice, are also playing a part in this role.

The introduction of the modern means of cybernetics has raised the role of science in industrial production. The automation of technological processes through the use of microprocessers, the introduction of robots into production lines and the large scale use of mini-computers are the elements of an industrial revolution that is based upon principles and devices of a high scientific level. Such achievements were possible through the organization of a broad fundamental and applied scientific research program.

In our country, the organization and direction of scientific research, the evaluation of the scientific human and material potential and its assignment and use according to the needs of the national economy represent concerns of the first order. The provision of an ever higher material, financial and human potential constitutes a priority objective of economic policy. If in 1965 the number of people involved in research was 50,000, in 1980 it reached 200,000 and in 1985 it will reach 245,000. Fixed assets have increased in 1980 by 4.5 times compared to 1965, while expenditures for research have increased during this period from 5 billion lei (the 1961-1965 five year plan) to 48 billion lei (the 1976-1980 five year plan), and they will reach 70 billion lei in the 1981-1985 five year plan.

Concomitantly with the development of the material base, a continuing action has taken place in research to improve leadership and the organizational structure. Today, all activities for scientific research, technological development and the introduction of technical progress is coordinated and guided in Romania by the National Council for Science and Technology. As a deliberative and broadly representative party and state organ, it is composed of over 300 reputed scientists (general directors and directors of institutes, presidents of academies, university professors, academicians and researchers from institutes, industrial centrals and enterprises). Scientific research is carried out in each branch or field of activity by research institutes or centers, with the number of these places throughout the country reaching nearly 200. Their activities are coordinated in a unified manner by 10 central research institutes and 3 specialized academies. In the ministries, there are technical directorates and in the centrals and enterprises there are design departments which, paralleling research activities, have the express task of applying to production completed scientific research. Moreover, science and research are continually moving in all economic affairs, with a conclusive expression of this being the broad specific actions that are carried out within the framework of "Romanian Science and Technology Week."

One of the principal tasks is to shorten the research-production cycle, to increase the economic efficiency of scientific research and to reduce the costs in the complete research-application-development cycle. This requries broad interdisciplinary cooperation and the permanent presence of scientific research and technological engineering throughout the cycle, up to the point of start-up of operation and the achievement of designed parameters. Studies in marketing, capabilities and the provision of raw, energy, ecological and social materials must constitute the basis of applied scientific research.

Science has become a direct force of production in the sense of its participation in an essential role in the direct determination of the content and the results of production processes, both through its ability to innovate and optimize and through its decisions and solutions. The practical, specific effects of science are always included in the results of production activities, which science constantly intensifies.

The advance of civilization through science principally stems from its ability to generate new items for use and to create technical solutions that will ensure either a new way to satisfy certain known needs or a way to satisfy certain new needs, without reducing in the slightest way its contribution to increasing labor productivity and reducing material costs in the production processes that produce new items for use. Furthermore, the efficiency that is obtained with the help of science if tied to the evolution and timely spread of certain quantitative aspects that lead to a new economic quality.

Beginning with the major role of scientific research in promoting technical progress, the guidelines for the future economic-social development of Romania foresee that research will have to permanently stay ahead of the development of production, with it concentrating on the solutions of those problems that stem from the major directions of economic-social growth. First of all, technical-scientific research's staying ahead of production is a decisive problem for ensuring the continuing process of economic development. This stems from the fact that research must make those scientific discoveries needed by production and express them in means of production, in high-efficiency technologies and in the organization and training of a highly-qualified workforce. Second, this staying ahead is a problem of timing, which means that technical-scientific research must develop at a rate faster than production.

A Decisive Role in the Process of Developing and Modernizing the Economy

Experience shows that scientific research and the degree and rate of applying its results in the economy, especially in material production, become essential factors of economic development. This gives research a special role in the overall process of social reproduction. In this regard, it is a clear fact that in the economically advanced countries the greatest part of production growth is currently provided by the promotion of technical-scientific progress which, for its part, depends to an ever greater degree upon the level, scope and results of scientific research. Under the stimulus of research and other determining factors of the contemporary technical-scientific revolution, broad changes have taken place or are being carried out in the individual branches of production, there has been an increase in the degree of processing raw materials, new branches and products have appeared and there has been an upgrading to a great degree of the variety of production in the traditional branches.

In this regard, in Romania, as well as in other countries, the most important change is in the accentuation of the industrial nature of production. Under the conditions of a sustained evolution of production in the principal branches of the national economy, in 1970 the percentage of industry contained in the creation of the social product and national income was 63 percent and 59 percent, respectively, compared to 46.6 percent and 44 percent in 1950. Significant changes have occurred in these three decades in the social structure of our country. If in 1950, 12 percent of the people were employed in industry, in 1979 it was 37.7 percent. In construction the growth was from 2.2 percent to 9.1 percent. In agriculture the percentage fell from 74.1 percent to 30.7 percent while grain production increased from 8,982,500 tons to 19,337,200 tons, or 2.15 times over, and total agricultural production increased by 2.8 times over. During the same period, the percentage of workers within the total number of employed persons increased from 25.3 percent to 69.6 percent. These changes in the social structure are not just of a quantitative nature, but also have a revolutionary qualitative significance in the social and political affairs of the country in the sense of strengthening the role of the working class both in the production of material goods and in political and social activities.

In accordance with the fundamental objective of the current stage, creating a multilaterally developed socialist society and advancing Romania towards communism, the 1981-1985 five year plan will continue to ensure a sustained development of society's technical-material base. Industry has a significant role in creating national income and carrying out expanded reproduction. Industry's key position is not just the result of quantitative development, but also of changes that have occurred in its structure under the impact of the technical-scientific revolution and that have allowed it to make a broader contribution to equipping overall material production with high technology, using new sources and putting to better use those involved to a greater degree in the economic circuit.

For the purpose of modernizing the structure of industrial production in step with the requirements of technical-scientific progress, the basic branches - electrical and thermal energy, metallurgy, machine building and chemicals - were ensured a high rate of growth so that they considerably increased their contribution to the achievement of industrial production. Thus, we reached the point that those branches which ensure the higher use of material resources (the corresponding sectors in machine building, chemicals, metallurgy and so forth) totalled over half of the country's industrial production in 1980.

The Social Impact of the Spread of the Scientific-Technical Revolution

The social sciences are called upon to increase their contribution to improving the organization of leadership and national economic planning. Our party has frequently stressed that these sciences must work more and more efficiently in the direction of knowing and understanding the general laws of societal development and, especially, come up with solutions for their application to the specific conditions of Romania. With regards to the role of the social sciences in the development of our country and society in general, the secretary general of the party, comrade Nicolae Ceausescu pointed out at the 10th Congress in August 1969: "Alongside the positive sciences that increase the creative potential of modern man, the social sciences help the people in understanding and interpreting the world and in understanding the interdependency between the different objectives laws that govern society, and offer answers to the questions regarding the great changes that are taking place in the development of social affairs both in country and in the entire world. Our party asks the workers in the field of the social sciences to concentrate their activities to study the phenomena which characterizes our country's current development and to make deal with the new problems raised by the development of human society during the contemporary era. We need truly scientific researchers in the fields of economics, philosophy, sociology, history and law who can offer materials for conclusions in solving the problems of the development of our society."[2]

---

[2] Nicolae Ceausescu, "Romania on the Path of Creating a Multilaterally Developed Socialist Society," Vol 4, Bucharest, Politica Publishing House, 1970, pp 323-324.

Science and technology have numerous implications in social affairs, bringing about profound changes in the awareness in our ear. Knowing the newest scientific achievements in the world and the confrontation of ideas in scientific thought and contemporary social-political thought and understanding the realities in our society constitute fundamental requirements for all social-economic activities and, in the final analysis, for the scientific leadership of socialist society.

The human factor has decisive importance for scientific research and technological innovation, as well as for the use of scientific-technical advances. In this regard, we have the problem tied to the growth of the scientists' social responsibilities and those of the specialists in research and technological engineering for forming their moral-political profile and for increasing their contribution to the proper direction and organization of research activities and their organic link to the most current problems of economic and social progress. Within this framework, there are the concerns for continuing to raise the qualifications and broadening the horizons of knowledge of all workers and for developing their social awareness.

Constituting elements of decisive significance for the development of production and for the improvement of leadership methods in economic and social affairs, science and technology represent, at the same time, among the most powerful factors for lifting all the people to a high level of culture and civilization. The person involved in the great transformations that our society is experiencing is to an ever greater degree involved in new responsibilities, in the sense of participating not only in social work, but also in managing economic-social affairs. This requires the growth in his degree of competency through multilateral development of his personality, understanding this to be not only a broadening of his horizons of knowledge and the creation of an advance concept about nature and science and an appropriate moral and political awareness, but also a receptivity for new things.

The profound implications of science in contemporary society are to an ever greater degree influenced by the creative activities of man. The current development of the forces of production needs not so much the physical efforts of man, but his efforts for technical action and innovation based upon thorough scientific thought. In addition to the essential modifications brought about by the scientific and technical revolution in the material base of society, it requires changes at least as important with regards to man. In this direction, education has an ever more important role. The quality of instruction and the amount of knowledge held by the human factor and his ability to take actions on this basis are decisive for all economic-social activities. In this regard, we can point out that the 1978/1979 school year produced 152,000 high school graduates (compared to 13,000 in 1950/1951); professional and apprenticeship training produced 71,600 graduates (24,700 in 1950/1951); and higher education had 35,300 graduates (9,500 in 1950/1951). We find a substantial increase in all the forms and levels of education, with the most important being recorded within the framework of high school education. The new concept of education promoted by our party begins with the premise that under the conditions of the unusually accelerated rate in which science and technology is progressing - having as a result an ever more accentuated specialization of human activities and, at the same time, an increased mobility in professions - only an education integrated with scientific research and production activities, ensuring a broad training profile, is capable of contributing to the multilateral development of man.

Science with its multiple values in the end determines the level of knowledge, education and production, and conceptually determines the level of the quality of life and civilization, and influences all social, material and spiritual life in society.

8724
CSO: 2700/367

AGRICULTURAL PROGRESS, PLANS FOR FUTURE DESCRIBED

Bucharest REVISTA ECONOMICA in Romanian No 34,21 Aug 81 pp 11-12

[Article by Marin Constantin: "Achievements and Prespectives for Romanian Agriculture in Carrying Out the New Agricultural Revolution"]

[Text] The 12th Congress of the Romanian Communist Party, outlining the path for and objectives of agriculture during the 1981-1985 five year plan and in the future, especially accentuated its role in the strategy of the overall development of the national economy, keeping in mind the need to increase the contribution of this branch to the creation of national income, to the satisfaction of the scientifically substantiated consumer requirements for all the people and to the supply of the raw materials processing industries, as well as to the provision of certain increased quantities of products slated for export.

Multilaterally dealing with the current problems of Romanian agriculture, comrade Nicolae Ceausescu emphasized in his Report to the Congress: "An essential objective of the future five year plan is the carrying out of a profound agrarian revolution involving both the technical-material base and the organization of production. To this end, we will ensure the rational use of the entire land area, the completion of the process of establishing regions for crops and crop rotation, the complex mechanization of projects, the introduction of chemicals into production, the full modernization of fruit tree growing and wine growing, the continued growth and improvement of animal breeds and the radical solution of the fodder problem."

These guidelines, translated into objectives and tasks in the Plan for the Development of Agriculture and the Food Industry during the 1981-1985 Period, adopted as law by the Grand National Assembly, call for the acceleration of the process of intensive development and modernization of agriculture as a priority branch of the Romanian economy.

The Development of the Technical-Material Base

The development and modernization of agriculture's technical-material base have been and are fundamental coordinates of the agrarian policy of our party and state. Characteristic in this regard is the continued growth of investments in agriculture: from 5.8 billion lei during the 1951-1955 period, the allocated investment funds increased to 37 billion lei in 1961-1965, 77 billion lei in 1971-1975 and 120 billion lei in 1976-1980.

The growth in absolute terms of the investments from the state funds and the increased percentage of these funds within the total amount of investments in agriculture constitutes a graphic expression of the assistance that our state has given to the development of agriculture, especially in the last 15 years. Thus, in the last five year plan the investment funds allocated to agriculture from the state's resources were equal to those allocated to the entire national economy during the 1951-1958 period, exceeding the total amount of investment funds allocated to agriculture during the first four five year plans (1951-1970). At the same time, we must keep in mind the important financial and material efforts made by the state in the industrial branches, such as machine building, chemicals, construction materials and so forth, to create new facilities and a modern production potential that provides agriculture with the technical-material base necessary for intensifying vegetable and animal production.

The study of the allocation of investments by category of agricultural unit shows that a good portion was given to the state agricultural enterprises, keeping in mind their role in the modernization and promotion of technical progress at the level of the entire branch and their contribution to the achievement of the state fund of agricultural products. Significant investments were also allocated to the agricultural machinery stations, units that are continually growing and in which nearly all the tractor and agricultural machinery pools are concentrated. To this, we can also add the ever greater help that was given to the agricultural production cooperatives by the state through credits for the development of production capacities. At the same time, depending upon the degree of their economic-organizational consolidation and the development of public property, the cooperatives' own investment funds have increased from year to year.

As a natural result of the efforts in the area of investments made by the state and the agricultural production cooperatives, there has been a continual increase in the fixed assets in the socialist units in agriculture. Thus, in 1980 the value of these assets was over four times greater than two decades ago.

Of greatest significance for the progress of agriculture is the manner in which investments are used and the directions in which they are applied. The party and state leadership, and comrade Nicolae Ceausescu personally, have decisively directed the investments allocated to agriculture towards the development and modernization of the technical-material base in the principal fields of activity, which directly ensures the growth of agricultural production and economic efficiency.

Projects planned for irrigation, brought about because of an insufficient amount of precipitation, a limiting factor in obtaining higher and stable production in the most fertile regions of the country, have had the principal percentage within the framework of the investments allocated for land improvement projects. The surface area under irrigation has increased from 42,500 hectares in 1950 to over 2,300,000 hectares in the present. Similarly, great efforts have been made in investments to combat soil errosion and excessive humidity, to use sandy soils, correct acid and salty soils, carry out diking and draining projects, and so forth.

Putting to use the advantages of organizing our country's agriculture in large socialist units having a high degree of production concentration and specialization capable of ensuring an increase in labor productivity has required an increase in supplying these units with agricultural tractors and machinery through the allocation of a significant portion of investments for the complete and complex mechanization of agriculture. Compared to 1938 the tractor motor pool has increased 38 times over, by 1980. As a result, the arable surface area per physical tractor has decreased from approximately 2,500 hectares in 1938, or 320 in 1949, to 83 in 1980. Parallel with this, there has been an increase in the supply of a broad variety of agricultural machinery.

In addition to mechanization, the chemicalization of the production processes has become one of the principal factors of the technical-scientific revolution in Romania's agriculture. It is a significant fact that from less than one kilogram of active substance per hectare, which was the average level of consumption of chemical fertilizers in 1950, we reached 27 kilogram of active subtance per hectare in 1965 and approximately 130 in 1980. Concomitantly, there has been a considerable increase in the variety of pesticides used.

The unusually favorable conditions existing in our country for the development of wine growing and fruit tree growing and the need to raise the productivity and economic efficiency of these sub-branches were put to better use through the allocation of investments for the extension of the lands used for wine and fruit tree growing and through the creation of plantations in intensive systems of tens of thousands of hectares and the modernization and intensive management of existing plantations.

Concomitantly with the solution of the cereal grain problem, the intensive use and modernization of agriculture require a considerable increase in animal production. Increasing the percentage of this production within the total of agricultural production to approximately 50 percent has been one of the major objectives of our party's agrarian policy. In order to do this, at the initiative of the party and state leadership we have moved to the elaboration and implementation of the national program for the development of zootechny, within the framework of which a central place is held by the creation and development of production capacities having an industrial technological flux in the state agricultural units, during the first stage, and later in the agricultural production cooperatives. These capacities, true factories for producing meat, milk and eggs, reached in 1980 over 600,000 places in cattle raising farms, over 6.5 million in pig raising farms, approximately 2 million in sheep raising farms, over 28 million in chicken farms and approximately 13 million for egg-laying chickens. Under these conditions, the contribution of the industrial complexes to the total amount of zootechnical production in the socialist sector of agriculture approached 75 percent for meat and over 90 percent for eggs.

The design, construction, supply and organization of activities and production in the industrial-type large zootechnical units, some of which, such as the pig raising complexes and the poultry combines, are at a high level on a worldwide scale with regards to capacities and certain levels of production performance, have resulted in the accumulation of an especially valuable experience and a true treasure of lessons and conclusions, permitting, at the same time, the formation of a numerous group of engineers and technicians specialized in industrial-type zootechny. All these achievements have been expressed as a precious asset of Romanian technical and organization intelligence that has been and is being used in cooperative actions in agriculture which Romania is carrying out with a large number of countries and, first of all, with the developing nations.

A Superior Production Potential

The growth of the potential of Romanian agriculture has found its expression in the continuing increase of agricultural production, with an average annual increase of five percent. In the 1971-1980 decade, the value of total annual agricultural production recorded an increase of approximately 180 percent. In the last five year plan, an average annual production of cereal grains of 19.4 million tons was achieved, or 4.5 million tons more than during the 1971-1975 period. There was also a considerable increase in the production of vegetables, potatoes, fruits and grapes, and there was an increase in the number of all types of animals, especially for pigs, sheep and poultry. Compared to the average annual levels recorded during the previous five year plan, we recorded increases of 560,000 tons of meat, 10.3 million hectoliters of cow milk and approximately 2 billion eggs.

The important successes obtained during the period since the Ninth Party Congress in the development of our socialist agriculture, as well as the qualitative leap that is foreseen for its evolution during the 1981-1985 five year plan and in the future, are indissoluably tied to the daring thought and the practical activities carried out by the secretary general of the party, comrade Nicolae Ceausescu, to his ability to decipher the constantly new requirements of development and to his giving clear expression to them in elaborating the party's agricultural policy.

The scientific analysis of the realities in Romanian agriculture and the defining of its principal trends have found their expression in the elaboration of an original and broadly encompassing concept regarding the role and place of agriculture in the national economic complex.

Beginning with the reality that our agriculture constitutes a basic branch of the national economy, the party places in the center of its agricultural policy the achievement of a modern, intensive, high-productivity agriculture that can apply the newest advances of science on a broad scale. Comrade Nicolae Ceausescu pointed out at the Second Congress of the Peasantry that: "It is clear that without an intensive agriculture of high productivity organized on the basis of the newest advances of science we cannot ensure either the creation of a multilaterally developed socialist society or the building of communism in our country."

The achievement of such an agriculture is the equivalent of a revolution in the techniques and technologies used in our agriculture. First of all, it will be achieved through: the provision of a powerful technical-material base; the broad penetration of technical progress along its principal directions - the growth of the production capacity of the land (which, regardless of the type of property - state, cooperatist or private, represents a national asset and the wealth of all the people); the mechanization and automation of production processes; the multilateral use of chemicals; the application to production of the advances of the biological sciences, especially in nutrition and genetics; the increase in the training of the workforce; and the continued improvement of the activities of the new organizational structures and, first of all, of the unified state and cooperatist agro-industrial councils.

The result of the concerns in the abovementioned directions will represent the development and ever more pronounced affirmation of an industrial-type agriculture which, in the future, will lead to the transformation of activities in agriculture into a variation of industrial work.

It is especially important that the agriculture in the current five year plan be helped on a technical basis that will mark a powerful development and modernization. To this end, the total volume of investments for agriculture is to rise to 155 billion lei. The technical base of our agriculture will be characterized by an increase in the number and diversity of tractors. We will provide the necessary number of 80 horsepower tracked tractors to mechanize agricultural work of hillsides, and there will be an increase in the percentage of specialized tractors for mechanizing horticultural work. The agricultural units will receive, in correlation with the structure of their energy base, modern machinery of high productivity which, through their combination, will permit the power of their motors to be more efficiently used. There will also be an increase in the degree of universality in agricultural machinery by equipping them with different active components.

Similarly, during the current five year plan irrigated areas will increase by approximately 600,000 hectares and we will carry out projects to combat excessive humidity on another 940,000 hectares and to combat soil erosion on 575,000 hectares.

At the end of the five year plan, for each hectare of arable land, vineyard and orchard the amount of chemical fertilizer (active substance) will be approximately double compared to that used in the 1976-1980 five year plan. Industry will deliver over 16 million tons of chemical fertilizers (active substances), allowing the achievement of an average annual consumption of 320 kilograms per hectare. Larger amounts of concentrated fertilizers will be used, and we will move on a broad scale to the use of liquid fertilizers containing nitrogen, fertilizers having a foliage action and so forth.

Obtaining a certain agricultural production that is ever larger calls for carrying out certain sustained actions for raising the level of professional training of all agricultural workers. Concomitantly with the provision and stabilization of the workforce, we have the problem of creating a group of certain agricultural workers having a multilateral training capable of employing modern technical means with maximum efficiency.

Similarly, of great significance are the objectives that foresee the maturization of the different elements of closing the gap between the two main sectors of Romanian agriculture - the state sector and the cooperatist sector - through an intensification of cooperation and association in production, the extension of cooperation between them and the development of common elements that bring them closer together, with an important role being played in this regard by the unified state and cooperatist agro-industrial councils. Recently, the Political Executive Committee of the Central Committee of the Romanian Communist Party approved measures for the more judicious sizing of these councils by reducing their number and maintaining a single station for the mechanization of agriculture at each council, measures that will create even better conditions for the rational use of the land and for the growth of production.

In accordance with the decisions of the 12th Party Congress and the provisions of the new five year plan, agricultural production (an annual average for the period) is to grow by 24.4 to 27.4 percent compared to that of the 1976-1980 period, thus providing an appropriate supply to the people and meeting all the requirements of the national economy.

The plan calls for agricultural production to reach in 1985, under normal climatic conditions, 28.5 million tons of cereals, 1.2 million tons of sunflowers and rape, 12.6 million tons of sugar beets, 6.7 million tons of fall potatoes 6 million tons of field vegetables, 3 million tons of fruits, 2.4 million tons of grapes and so forth. In zootechny, it calls for the number of animals in 1985 to reach 7 million head of cattle, 15 million pigs, 21.5 million sheep and goats and 63.3 million egg-laying poultry. We will put into operation 375 new facilities (over 180,000 places in cow farms, 440,000 places in cattle raising farms, pig farms having a total capacity of 310,000 tons of live-weight pigs and new poultry raising complexes).

Agriculture will have a stronger material base and a more modern one which will give a guarantee for the complete fulfillment of the plans that are drawn up. The results, however, are influenced by the intensification of organizational work so that each agricultural unit and each farm will intensively use the agricultural lands, mechanical equipment will be used with a maximum of efficiency and new projects will enter into operation on schedule.

Corresponding to the objectives established by the current five year plan, agriculture must satisfy the people's consumer demands for agro-food products at a higher level, which, in 1985, will reach a level per inhabitant of 68 kilograms of meat and meat products, 222 liters of milk and milk products, 290 eggs, 39 kilograms of sugar and sugar products, 160-170 kilograms of vegetables and vegetable products, 100 kilograms of potatoes and so forth.

The tasks and objectives of the current five year plan require giving special significance to raising the efficiency of agricultural production, giving all the responsible authorities in agriculture the tasks of managing the existing human, material and financial resources with a high degree of responsibility so that each expenditure made will yield a maximum amount of production. Paralleling the continued modernization and development of the technical-material base, we will work to create all the conditions necessary for applying the new economic-financial mechanism and self-management and self-administration. This will give them both the opportunity to contribute to the development of society and the means necessary to establish their own funds for self-financing, as well as for meeting those expenditures slated for certain social needs.

The continued supply of agriculture with modern technical resources and the increase in the qualifications of the workforce will bring about a substantial increase in labor productivity. Thus, in 1990 a worker in agriculture will have to provide the food for 25 persons, or five to six times more than at the present time. At the same time, there will be an increase in the percentage of industrial production in the villages, where during the same period a significant number of industrial projects will be built in these rural locations. This construction will be capable of creating the conditions to transform 300 more town centers into agro-industrial cities by 1990.

This will bring about a greater stability in the rural population and will contribute to the gradual disappearance of the essential differences regarding the working conditions and the life styles of the workers in industry and in agriculture, and to the growing homogenization of the general level of civilization of our socialist society.

8724
CSO: 2700/367

END

END OF FICHE

DATE FILMED

25 Sept. 1981